

INDEX OF AUTHORS.

ABSTRACTS A, 1940.

An asterisk denotes a previous abstract.

- Anon., anthelmintics, III, 63. Use of mercurochrome on mustard gas wounds, III, 254. Viruses, III, 543. Annual review of physiology, 1940, Vol. 2, III, 620. Treatment of blood disorders, III, 788. Roentgen therapy in blood disorders, III, 788. A symposium on the blood and blood-forming organs, III, 276. The hypothalamus and central levels of autonomic function, III, 570.
- A.
- Aaron, B. See Kraemer, M.
- Aaronson, A. L. See Rubin, S. S.
- Aavakivi, R. See Perlitz, H.
- Abadie, P. See Girard, P.
- Abarbanel, A. R., percutaneous administration of testosterone propionate for dysmenorrhœa, III, 661. Inhibition of œstrin-deprivation bleeding in rhesus monkey with testosterone derivatives variously administered, III, 849. See also Rubinstein, H. S.
- Abbasy, M. A. See Harris, L. J.
- Abbate, R., and Donatelli, L., effect of sexual hormones in prepubertal dogs, III, 217. Effect of sexual hormones on prostate gland, III, 217.
- Abbie, A. A., excitable cortex in marsupials, III, 719. Cortical lamination in monotremata, III, 719.
- Abbot, L. D., jun., and Lewis, H. B., metabolism of amino-acids. VIII. Glycine precursors; availability of *N*-methylglycine, *NN*-dimethylglycine, and betaine for synthesis of hippuric acid by rabbits, III, 149.
- Abbott, O. D., Ahmann, G. F., and Overstreet, R. M., effect of avitaminosis-A on human blood picture, III, 89. and De Masters, C. U., choline in diet of chickens, III, 510.
- Abcede, J. B., and Santos, A. C., mercurated carvacrol, II, 384.
- Abderhalden, E., chemical structure of genes in relation to heredity, III, 553. and Abderhalden, R., cure of vitamin-B₁ deficiency in pigeons by administration of thiazole and pyrimidine components of aneurin, III, 512.
- Abderhalden, R. See Abderhalden, E.
- Abel, G., differentiation of acid-fast bacteria by agglutination; differences in antigen structure of gallinaceous strains and their *S* and *R* variants, III, 772.
- Abel, M. S., quantitative study of height of thyroid acinar cells in normal and abnormal thyroids, III, 806.
- Abel, S., and Windle, W. F., relation of volume of pulmonary circulation to respiration at birth, III, 633.
- Abel, T. M., "subjective" colours from line-patterns viewed in polychromatic and monochromatic light, III, 204.
- Abel, W., dentition of Fuegian Indians, III, 554.
- Abelin, I., thyroidal and non-thyroidal iodine, III, 303. Skin changes in experimental hyperthyroidism, III, 496. Thyroid gland and potassium metabolism, III, 725. and Keller, A., chemical nature of iodothyroglobulin, III, 207. and Wehren, E., thyroxine content of body, III, 496.
- Abeloos, M., secondary sexual characters in *Timarchas*, III, 464.
- Abels, H., congenital wry neck, III, 888.
- Abelson, P. H., identification of characteristic X-rays associated with radioactive decay, I, 3. See also McMillan, E.
- Abelson, S. N. See Leichenger, H.
- Abercrombie, M., evocation in chick, III, 372.
- Aberdeen, E. See Boos, M. F.
- Abernethy, J. L. See Hurd, C. D.
- Abernethy, T. J., Dowling, H. F., and Hartman, C. R., treatment of lobar pneumonia with sulphapyridine and sodium sulphapyridine; effective blood levels, III, 757. See also Dowling, H. F.
- Abf, H. See Mayeda, S.
- Abichandani, C. T., and Jatar, S. K. K., dissociation constant of β -resorcylic acid, I, 73.
- Abkin, A., and Medvedev, S., kinetics of polymerisation of butadiene in presence of metallic sodium, I, 261.
- Ablard, J. E., McKinney, D. S., and Warner, J. C., conductance, dissociation constant, and heat of dissociation of triethylamine in water, I, 412.
- Ablov, A., complex salts of cobalt^{III} with dimethylglyoxime [and aromatic amines], II, 162.
- Abraham, E. P., cophosphorylase from co-enzyme of *D*-amino-acid oxidase, III, 73. and Adler, E., specificity of diaphorase (co-enzyme factor), III, 261.
- Abrahamson, E. M., inexpensive warm stage, III, 84. Obtaining blood serum, III, 378.
- Abrahamson, R. H. See Gais, E. S.
- Abramov, M. M. See Parfenteev, L. N.
- Abramov, V. S., and Malski, P. G., action of phenyclone on organo-magnesium compounds, II, 14. and Mitropolitanskaja, C. L., cyclone series, II, 375. See also Arbuzov, E. A.
- Abramova, N. M., and Dolgov, B. N., preparation of esters. VII, II, 151.
- Abramovitch, B. See Hauser, C. R.
- Abramowitz, A. A., purification of chromatophoretic hormone of crustacean eye-stalk, III, 405. Biological assay of intermedin, III, 683. and Hisaw, F. L., effects of proteolytic enzymes on purified gonadotropic hormones, III, 120.
- Abrams, I. R. See Bnnndesen, H. N.
- Abrams, M. I. See Sidel, N.
- Abramson, A. W., and Flacks, B., M. & B. 693 in staphylococcal septicæmia, III, 242.
- Abramson, D. I., Katzenstein, K. H., and Senior, F. A., effect of nicotinic acid on peripheral blood flow in man, III, 710.
- Schkloven, N., Margolis, M. N., and Mirsky, I. A., influence of massive doses of insulin on peripheral blood flow in man, III, 385.
- Zazele, H., and Oppenheimer, B. S., plethysmographic studies of peripheral blood flow in man, III, 294. See also Ferris, E. B.
- Abramson, H. A., determination of electrical charge of surfaces by microscopic method of electrophoresis, I, 72. Microscopic method of electrophoresis and its application to study of ionogenic and non-ionogenic surfaces, I, 114. Electrophoresis of adrenaline into skin in asthma, III, 125.

- Abramson, H. A., whealing response of human skin to ultra-violet light, and histamine theory of allergic reactions, III, 606.
- Moore, D. H., Gettner, H., Gagarin, J., and Jennings, L., electrophoretic isolation of constituents of ragweed pollen extracts, III, 777.
- See also Gorin, M. H.
- Abse, D. W. See Jones, E.
- Abt, A. F., oral administration of potassium chloride in treatment of hay fever, nasal allergy, asthma, and sinusitis, III, 247.
- Farmer, C. J., and Topper, Y. J., influence of catharsis and diarrhoea on gastro-intestinal absorption of ascorbic acid in infants, III, 515.
- See also Farmer, C. J.
- Acharya, B. G., Shah, R. C., and Wheeler, T. S., chalkones; reactions of *o*-hydroxyphenyl 6-methoxy-2:3-benzostyryl ketone and derivatives, II, 285.
- Acharya, B. N., and Devadatta, S. C., compounds of phosphorus in milk, III, 44. Phosphorus, calcium, and magnesium in milk, III, 44.
- Achieser, A., properties of electron gas in a magnetic field, I, 2.
- Achs, S. See Bernstein, F.
- Achumov, E. I., apparent molar volumes of salts in ammoniacal and aqueous solution, I, 436.
- Ackart, R. J., and Leavy, S., experimental reversal of sex in salamanders by injection of œstrone, III, 652.
- Shaw, J. S., and Lawrence, J. S., blood picture of normal cats, III, 702.
- Acree, F., jun., and La Forge, F. B., allenes. I. Preparation of α -phenyl- Δ^2 -butadiene. II. Preparation of α -cyclohexyl- Δ^2 -pentadiene. III. Comparison of substituted allenes with pyrethron with respect to their behaviour towards halogens, II, 10, 122, 325.
- See also La Forge, F. B.
- Acree, S. F. See Elliott, M. A., Hamer, W. J., and Hughes, E. E.
- Adair, G. S., and Adair, M. E., membrane potentials, valencies, and theoretical and observed mobilities of hæmoglobin and egg-albumin, I, 115.
- Adair, M. E. See Adair, G. S.
- Adamonis, F. See Hrynakowski, K.
- Adami, E., determination of bactericidal power of disinfectants, III, 862.
- Adams, A. B., Brown, R. S., Barnes, W. H., and Maass, O., vacuum adiabatic calorimeter, I, 40.
- Adams, A. E., sexual conditions in *Triturus viridescens*, III, 739.
- De Forest, E. M., and Granger, B., effects of administering mouse anterior pituitary to newt and frog, III, 214.
- Adams, E., reaction to pituitrin and adrenaline of the myometrium of sow, III, 660.
- Adams, E. M., Spencer, H. C., and Irish, D. D., acute vapour toxicity of allyl chloride, III, 762.
- Adams, J. E., procedure for staining filamentous algae and fungi on slide, III, 467.
- Adams, J. R., jun. See Marker, R. E.
- Adams, L. See Hiatt, N.
- Adams, L. J., post-operative parathyroid tetany treated with dihydrotachysterol (A.T.10), III, 497.
- Adams, M. A. See Gessler, C. J., and Taylor, F. H. L.
- Adams, R., marihuana, III, 863.
- and Baker, B. R., structure of cannabinol. IV. Synthesis of two additional isomerides containing a resorcinol residue. V. Second method of synthesis of cannabinol. VII. Synthesis of a tetrahydrocannabinol which possesses marihuana activity, II, 354, 379.
- Baker, B. R., and Wearn, R. B., structure of cannabinol. III. Synthesis of cannabinol, 6''-hydroxy-2:2:5'-trimethyl-3''-*n*-amyldibenzopyran, II, 354.
- Cain, C. K., and Baker, B. R., structure of cannabinol. II. Synthesis of two isomerides, 4''-hydroxy-2:2:5'-trimethyl-3''- and -5''-*n*-amyldibenzopyran, II, 354.
- Cain, C. K., and Wolff, H., structure of cannabidiol. II. Absorption spectra compared with those of various dihydric phenols, II, 215.
- and Dankert, L. J., restricted rotation in arylamines. I. Preparation and resolution of 3-bromo-2:4:6-*N*-tetramethylsuccinilic acid, II, 339.
- and Gold, M. H., synthesis of 1:2-diphenyldihydroisobenzofurans, 1:2-diphenylisobenzofurans, and *o*-dibenzoylbenzene derivatives from the diene addition products to dibenzoyl ethylene, II, 103. Absorption and fluorescence spectra of dihydroisobenzofurans and isobenzofurans, II, 353.
- Hunt, M., and Clark, J. H., structure of cannabidiol. I. III. Reduction and cleavage, II, 80, 215.
- Loewe, S., Pease, D. C., Cain, C. K., Wearn, R. B., Baker, B. R., and Wolff, H., structure of cannabinol. VIII. Position of the ethylenic linkings in cannabidiol; marihuana activity of tetrahydrocannabinols, II, 379.
- and Long, R. S., structure of monocrotaline. IV. Monocrotalic acid, II, 378.
- and Miller, M. W., restricted rotation in aryloléfines. I. Preparation and resolution of β -chloro- β -3-bromo-2:4:6-trimethylphenyl- α -methylacrylic acid, II, 85.
- Pease, D. C., Cain, C. K., Baker, B. R., Clark, J. H., Wolff, H., and Wearn, R. B., conversion of cannabidiol into a product with marihuana activity; type reaction for synthesis of analogous substances; conversion of cannabidiol into cannabinol, II, 355.
- Pease, D. C., Cain, C. K., and Clark, J. H., structure of cannabinol. VI. Isomerisation of cannabidiol to tetrahydrocannabinol, a physiologically active product; conversion of cannabidiol into cannabinol, II, 379.
- Pease, D. C., and Clark, J. H., isolation of cannabinol, cannabidiol, and quebrachitol from red oil of Minnesota wild hemp, II, 353.
- Pease, D. C., Clark, J. H., and Baker, B. R., structure of cannabinol. I. Preparation of an isomeride, 3-hydroxy-6:6:9-trimethyl-1-*n*-amyl-6-dibenzopyran [4''-hydroxy-2:2:5'-trimethyl-6''-*n*-amyldibenzopyran], II, 354.
- and Rogers, E. F., structure of monocrotaline, the alkaloid in *Crotalaria spectabilis* and *C. retusa*. I., II, 29.
- Adams, R., Rogers, E. F., and Long, R. S., structure of monocrotaline, the alkaloid in *Crotalaria spectabilis* and *C. retusa*. III. Monocrotalic acid, II, 29.
- Rogers, E. F., and Sprules, F. J., structure of monocrotaline, the alkaloid in *Crotalaria spectabilis* and *C. retusa*. II. Monocrotalic acid obtained by alkaline hydrolysis of the alkaloid, II, 29.
- and Teeter, H. M., stereochemistry of diphenyls. L. Comparison of the interference of a methoxyl and hydroxyl group, II, 345.
- and Wearn, R. B., diene addition products to diaroyl ethylenes and their transformation products, II, 280.
- Wolff, H., Cain, C. K., and Clark, J. H., structure of cannabidiol. IV. Position of the linking between the two rings. V. Position of the allylic ethylenic linkings, II, 304, 355.
- Adams, S. C. See Tyson, G. N., jun.
- Adams, S. F. See Roberts, R. W.
- Adams, W. E., cervical region of the *Lacertilia*, III, 85.
- See also Escudero, L.
- Adcock, F., preparation of high-purity iron on a large laboratory scale, I, 266.
- Adcock, J. D., Lyons, R. H., and Barnwell, J. B., circulatory effects produced in patient with pneumopericardium by artificially varying intrapericardial pressure, III, 631.
- Addarii, F., relationship between pancreas and sodium chloride, III, 412.
- and Jasonni, E., effect of large doses of ascorbic acid on normal adults, III, 52.
- and Scarlini, F., effect of extracts of adrenal cortex on water-salt exchange, III, 125. Effect of extracts of adrenal cortex on nitrogen metabolism, III, 411.
- and Volpe, F., effect of ascorbic acid on blood-sugar of scorbutic guinea-pigs, III, 12. Effect of ascorbic acid on blood-sugar curve after glucose, adrenaline, insulin, and thyroxine, III, 12.
- Adderley, C. H. See Don, C. S. D.
- Addey, W., congenital atresia of œsophagus, III, 906.
- Addicott, F. T., and Devirian, P. S., second growth factor for excised pea roots: nicotinic acid, III, 460.
- Addis, T., Lee, D. D., Lew, W., and Poo, L. J., protein content of organs and tissues at different levels of protein consumption, III, 510. Utilisation of parenterally administered horse serum by rat, III, 585.
- and Lew, W., diet and death in acute uræmia, III, 138. Age and rate of venous enlargement under increased venous pressure, III, 294. Rate and degree of restoration of lost organ tissue, III, 551. Protein consumption and restoration of lost organ tissue, III, 748.
- See also Poo, L. J.
- Addison, C. C., interfacial activity of short-chain isomerides, I, 22.
- Addlestone, J. A., Marsh, L. R., and Hall, G. C., system silver sulphate-aluminium sulphate-water, I, 164.
- Adel, A., atmospheric oxides of nitrogen, I, 144.
- and Lampland, C. O., atmospheric absorption of infra-red solar radiation at the Lowell observatory. II. Spectral interval 5.5–8 μ , I, 281.

- Adell, B., electrolytic dissociation of dicarboxylic acids in water and in aqueous alkali chloride solutions, I, 116. Dissociation of acetic, glycolic, and malonic acids in glycerol-water mixtures, I, 256.
- Adelmann, H. B., somites of *Amblystoma punctatum*, III, 552.
- Adkins, H. See Bowden, E., Cox, F. W., Schwogler, E. J., Stutsman, P. S., and Waddle, H. M.
- Adkison, J. L. See Culmer, C. U.
- Adler, A., hypoglycæmia in soldiers, III, 188.
- Adler, E., absolute reaction rates and the photovoltaic effect, I, 363.
- Elliot, S., and Elliot, L., enzymic phosphorylation of codehydrogenase I to II, III, 449.
- and Euler, H. von, breakdown of nucleotides and nucleic acids in tumours, III, 912.
- See also Abraham, E. P., Cedrangolo, F., and Euler, H. von.
- Adler, F. H. See McDonald, R.
- Adler, H. F., and Templeton, R. D., correlation of activity and transportation in colon of dog, III, 585.
- Adler, J. See Robson, J. M.
- Adler, S., Haskelberg, L., and Bergmann, F., synthesis of lipophilic chemotherapeutics. II. 4-Alkylaminoazobenzene-4'-arsonic acids, II, 262.
- Adloff, P., South African fossil anthropoid apes and origin of human dentition, III, 465.
- Adolph, E. F., variation in water content in frog, III, 242.
- Adolph, W. H. See Chang, P. C., Hsn, P. C., and Yeh, H. L.
- Adova, A. N., and Feldt, A. M., biochemical peculiarities of varying morphogenetic regions of the body of the axolotl under action of organisers, III, 315.
- Adriaens, L., and Waegemans, G., indigenous salt from Belgian Congo, III, 460.
- Adrian, E. D., sensory cortex (cat) and double representation of feet, III, 571.
- and Moruzzi, Giuseppe, impulses in pyramidal tract, III, 112.
- Adzumi, H., flow of gases through metallic capillaries at low pressures, I, 18.
- See also Tominaga, H.
- Aebersold, P. C., production of a beam of fast neutrons, I, 3.
- See also Anderson, E.
- Afanasiev, B. N., organic compounds of tantalum, II, 325.
- Afanasiev, V. A., olivinites of the Khabozero region (south-eastern part of the Kola Peninsula), I, 238. Alkaline rocks of the Ozernaya Varaka of the Khabozero region (south-western part of the Kola Peninsula), I, 238.
- Afremow, M. L. See Rhoads, P. S.
- Agar, H., and Macpherson, L., cerebrospinal fluid in alkalosis, III, 395.
- Agar, W. T., adrenaline, eserine, and guinea-pig's uterus, III, 906.
- Agarwal, B. M. S. See Dutt, S.
- Agno, M., Bernardini, G., Cacciapuoti, N. B., Ferretti, B., and Wick, G. C., anomalous absorption of hard component of cosmic rays in air, I, 309.
- Agerty, H. A. See Fischer, C. C., and Redman, J. L.
- Aggazzotti, A., thyro-parathyroidectomy and hyperglycæmia of hæmorrhage, III, 123.
- Aggeler, P. M., and Lucia, S. P., relation between prothrombin concentration and retraction of blood clot, III, 284.
- Lucia, S. P., and Goldman, L., effect of synthetic vitamin-K compounds on prothrombin concentration in man, III, 706.
- Lucia, S. P., and Tyson, L., potency of blood-coagulating substances, III, 284.
- Agliardi, N. See Schwab, G. M.
- Agnoli, R., comparative pharmacology of octyl derivatives, III, 439.
- Agness, H., and Smith, M. G., purpura hæmorrhagica associated with widespread deposits of crystalline material: reticuloendotheliosis, III, 558.
- Ahlström, L., Schlenk, F., and Euler, H. von, insulin and vitamin-B₁, III, 898.
- Ahmad, A., and Farmer, E. H., mechanism of polymerisation. V. Dimerisation of unconjugated pentadiene, II, 362.
- Ahmad, B. See Guha, R. C., and Muthanna, M. C.
- Ahmann, C. F. See Abbott, O. D.
- Aiazzi-Mancini, M., Donatelli, L., and Ciuffi, G., apparatus for examining surviving, isolated organs *in vitro*, III, 84. Apparatus for perfusion at constant pressure and temperature, III, 84.
- Aickin, R. G., and Bayliss, N. S., absorption spectrum of bromine vapour in the region 3400 to 2200 Å, I, 49.
- Aiki, T. See Miyazima, T.
- Ainsworth, A. W., analytical and micro-balances, I, 42.
- Airapetova, R. P. See Udovenko, V. V.
- Aird, R. B. See Strait, L. A.
- Aishwa, M., influence of anterior pituitary on tissue respiration. I. Influence of sodium luminal-strychnine, magnesium sulphate, and chloral hydrate. II. Influence of ergotamine, yohimbin, eserine, and atropine, III, 153.
- Aitken, T. E. See Braun, C. E.
- Aiyar, A. A. See Rau, R. K.
- Aizenberg, L. I., pectin substances of chicory, III, 695.
- Ajello, T., reactions with amyl nitrite, IV, II, 56. Oximinopyrroles. IX. and X. Transformation products of oximinopyrrole, II, 188.
- and Cusmano, S., oximinopyrroles. XIII. Behaviour with hydroxylamine hydrochloride, II, 194.
- Akabori, S., Ose, S., and Kaneko, T., synthesis of intermediate metabolic products of histidine. I. Synthesis of uronic acid, II, 314.
- Akahane, T. See Ogata, D.
- Akahira, T., and Kamazawa, M., measurement of high insulation resistance with valve electrometer, I, 395.
- Akamatsu, H., case of primary pinealoma in neighbourhood of the hypothalamus-infundibulum, III, 121.
- Akao, A., biology of growth of silkworms, III, 668.
- Akerlöf, G., and Kegeles, G., thermodynamics of concentrated aqueous solutions of sodium hydroxide, I, 214.
- Akerren, Y., physiological red blood picture during first year of life, III, 877.
- Akimoto, M. B. See Reese, J. D.
- Akiya, S., constitution of the tetrasaccharide fission product of starch by *Bacillus mesentericus vulgatus* amylase, I, II, 324.
- Akiyama, K., crystalline modification of alumina. I. Inversion of crystalline form of aluminium hydroxide by heating. II. Influence of CaO, MgO, Li₂O, Na₂O, and K₂O on crystal inversion of alumina, I, 171.
- Akkerman, A. M. See Kögli, F.
- Akō, T., vitamins in Manchurian millet, III, 512.
- See also Inoue, K., and Sumi, M.
- Akopjan, B. See Babajan, A.
- Akram, M., and Desai, R. D., naphthalene series. III. Properties of 4-acetyl-1-naphthol; preparation of 4-ethyl-1-naphthol. IV. Preparation and properties of 2:4-diacetyl- and 2-acetyl-4-propionyl-1-naphthol, II, 252.
- Desai, R. D., and Kamal, A., naphthalene series. I. Properties of 2-acetyl-1-naphthol; synthesis of 2-ethyl-1-naphthol, II, 252.
- Alaerts. See Lint, A. van.
- Albanese, A. A., electrolytic [micro-] method for determination of basic amino-acids in proteins, II, 320.
- Albaum, H. G. See Kaiser, S., and Pratt, R.
- Alber, H. K., and Bryant, J. T., systematic qualitative organic micro-analysis; determination of the refractive index of liquids, I, 301.
- Albers, D., separation of phosphatases into protein and prosthetic group. I. and II. Alkaline kidney-phosphatase, III, 348.
- and Merten, R., diagnostic value of carcinoma reactions. VII, III, 317.
- Albert, M., and Walzer, M., contact reactions in atopy. II. Incidence of contact reactions with various allergens, III, 691.
- Albert, S. See Notkin, L. J.
- Alberti, C., transformation of indolyl methyl ketones into indole homologues, II, II, 53.
- Alberts, G. G., and Dietrich, S., formation of carbohydrate from fat, III, 238.
- Albertson, W., extension of analyses of spectra of neutral osmium and iridium, I, 381.
- Albertson, W. E., Bruynes, H., and Hanau, R., normal electron configuration of singly ionised gadolinium, I, 183.
- See also Harrison, G. R.
- Albrecht, R., vitamin-C content of human milk before and after boiling, III, 594.
- Albright, F., Sulkowitch, H. W., and Chute, R., non-surgical removal of kidney stones, III, 223.
- See also Sturgis, S. H.
- Alburn, H. E., and Myers, V. C., creatine, phosphorus, and collagen content of sections of dog's heart, III, 291.
- Alchazov, D., Gurevitch, I., Kurtschatov, I., and Rukavishnikov, V., metastable levels of the gadolinium nucleus, I, 90.
- Kurtschatov, I., Meschtscherjakov, M. G., and Rukavishnikov, V., diffuse radiation of neutrons by the cyclotron, I, 3.
- Alder, A., Meulengracht's treatment of bleeding gastric ulcers, III, 219.
- Alder, K., and Rickett, H. F., diene synthesis. XI. Diene synthesis with vinyl esters and halogenated ethylenes; simple route to the norcamphor series. XIV. Preparation of alicyclic malonic, cyanoacetic, and acetoacetic esters, II, 81, 87.

- Alder, K., and Windemuth, E., diene synthesis. XII. Formation of compounds of camphor and epicamphor group by diene synthesis; diene syntheses of 1:5:5-trimethyl- $\Delta^{1:3}$ -cyclopentadiene and β -camphylic acid with vinyl acetate. XIII. Diene syntheses of 1:5:5-trimethyl- $\Delta^{1:3}$ -cyclopentadiene and α - and β -camphylic acids with malic anhydride and acetylenedicarboxylic acid, II, 98. cyclopentadiene series. II. α - and β -Camphylic acids and their decarboxylation products; 1:5:5-trimethyl- $\Delta^{1:3}$ -cyclopentadiene, II, 98.
- Alderman, A. R. See Madigan, C. T.
- Aldersley, J. B., Burkhardt, G. N., Gillam, A. E., and Hindley, N. C., synthesis of compounds related to the antirachitic vitamins. II, II, 82.
- Aldoschin, T. D., and Tschalichjan, V. S., iodination of organic compounds in presence of oxidising agents, II, 41.
- Aldrich, C. A., and Boyle, H. H., concentrated serum as diuretic [in nephrosis], III, 587.
- Aleskovski, V. B. See Alexeevski, E. V.
- Alexander, A. E., X-ray study of aragonite in natural and cultured pearls, I, 304.
- and Schulman, J. H., molecular interactions at oil-water interfaces. III. Interfacial tension measurements, I, 409.
- Alexander, B., and Subbarow, Y., bios in liver extract, III, 826.
- Alexander, E. A., and Tompkins, F. C., kinetics of oxidation of organic compounds by potassium permanganate. II. 2:6-Dinitrophenol, I, 415.
- Alexander, F. A. D., and Himwich, H. E., nitrogen inhalation therapy for schizophrenia, III, 486.
- Alexander, H. E., and Heidelberger, M., agglutinin and precipitin content of antisera to *Haemophilus influenzae*, type B, III, 263.
- Alexander, H. L., allergic syndromes in absence of allergens, III, 528.
- Elliott, R., and Kirchner, E., unresponsiveness of human skin to wheal formation, III, 841.
- Alexander, J., catalysts, catalyst-modifiers, life, and specificity of vital processes, III, 447.
- Alexander, K. See Raiford, L. C.
- Alexander, L., Wernicke's disease, III, 570.
- and Myerson, A., cell minerals in amaurotic idiocy, tuberous sclerosis, and related conditions, studied by microincineration and spectroscopy, III, 22.
- See also Buermann, A., and Seligman, A. M.
- Alexander, Leroy. See Klug, H. P.
- Alexander, L. T. See Hendricks, S. B.
- Alexander, R. A. See Mason, J. H.
- Alexander, W. A., and Schumacher, H. J., photochemical oxidation of chloral sensitised by chlorine, I, 34. Photochemical reaction between chlorine and chloral, I, 34.
- Alexander, W. F., innervation of biliary system, III, 715.
- Alexander, W. O., copper-rich nickel-aluminium-copper alloys. III. Effect of heat-treatment on microstructure, I, 21.
- Alexandri, A. V. See Carbone, D.
- Alexandrov, G. K. See Trifonov, N. A.
- Alexandrov, V. G., and Alexandrova, O. G., formation of endosperm in hard and soft wheats, III, 362.
- Alexandrova, O. G. See Alexandrov, V. G.
- Alexeeva, K. I., number of "decay electrons" accompanying penetrating particles, I, 279.
- Alexeeva, O. A. See Alimarin, I. P.
- Alexeeva, V. A., preparation of certain quinaldine methiodides, II, 381.
- Alexeevski, E. V., catalytic transformations of dimeride of $\Delta^{1:3}$ -cyclohexadiene, II, 40.
- and Aleskovski, V. B., sorptive and catalytic properties of active manganese dioxide, with reference to vapours and gases. III. Formation at active manganese dioxide of oxides of nitrogen, I, 408.
- Alexeevski, N. E., magnetic properties of thin superconductive films, I, 15.
- Alexopoulos, K., absorption of cosmic rays in thick layers. I. Absorption experiments with iron, I, 400.
- Alföldy, J. See Országh, O.
- Alfredson, B. V., and Sykes, J. F., bundle branch block, III, 708. Electrocardiographic changes in calves on low-potassium rations, III, 708.
- Alfvén, H., origin of cosmic radiation, I, 54.
- Algastrine, E., antagonism between cycliton and veronal, III, 442.
- Ali, S. N., absorption spectra of phosphorus compounds, I, 192.
- Alibrandi, A., nutrition and sexual development in cockerels, III, 511.
- Alichanian, A. I. See Alichanov, A. I.
- Alichanov, A. I., and Alichanian, A. I., energy losses of fast electrons, I, 89.
- Alichanian, A. I., and Kozodaev, M. S., scattering of fast electrons through large angles, I, 139.
- Alimarin, I. P., and Alexeeva, O. A., determination of germanium by means of 8-hydroxyquinoline, I, 270.
- Aliminosa, L. M. See Burstein, E.
- Aljaydin, V. N., Fedorov, V. V., and Levshin, V. L., decay of luminescence in certain classes of luminescent substances ($\text{Al}_2\text{O}_3\text{-Cr}$, $\text{CdI}_2\text{-MnCl}_2$, $\text{Zn}_2\text{SiO}_4\text{-Mn}$), I, 97.
- Alkan, W. J. See Kleeberg, J.
- Allais, (Mlle.) M. L. See Cauchois, (Mlle.) Y.
- Allara, E., spodographic research on mammary gland of cavy, III, 4. Taste organs in man. I. Structure of gustatory papillae at various ages, III, 206. Histophysiology of glandular connective tissue, III, 701.
- See also Torrioli, M.
- Allard, J. See Quelet, R.
- Allechin, J. P. See Friend, J. N.
- Allee, W. C., and Collias, N., influence of oestradiol on social organisation of flocks of hens, III, 735.
- and Lutherman, C. Z., effects of temperature on differential growth of pullets, III, 746.
- Allemann, O. See Meier, R.
- Allen, A. C., mixed tumours of mammary gland of dog and man, with special reference to problem of cartilage and bone formation, III, 670.
- Allen, A. J., and Franklin, R. G., hydrogen arc for absorption spectroscopy, I, 82.
- Sampson, M. B., and Franklin, R. G., cyclotron of the Biochemical Research Foundation, I, 41.
- Allen, C. F. H., and Bell, A., action of magnesium phenyl bromide on anthraquinones, II, 372.
- Bell, A. C., Bell, A., and Van Allen, J., addition reactions of phenyl vinyl ketone. VI. Diene synthesis, II, 176.
- Allen, C. F. H., and Frame, G. F., reaction between a highly substituted bromopyridine and lithium, II, 288.
- and Wilson, C. V., action of heat on bromonitro-compounds, II, 176.
- Allen, D. See MacBryde, C. M.
- Allen, E., gynaecologic problems of the adolescent girl, III, 34. Reproduction and associated endocrines, III, 659. Ovarian hormones and female genital cancer, III, 854.
- and MacDowell, E. C., variation in mouse embryos of eight days' gestation, III, 699.
- See also Gardner, W. U., and Worthington, R. V.
- Allen, E. G., and Haft, H. H., secretion of hydrochloric acid and urinary pH in 100 patients after injection of histamine, III, 218.
- Allen, E. V., treatment of peripheral vascular diseases, III, 293.
- and Hines, E. A., jun., lipædema of legs, III, 793.
- and Tuohy, E. B., relief of somatic pain by local anaesthetisation, III, 863.
- Allen, F., and Schwartz, M., effect of stimulation of senses of vision, hearing, taste, and smell on sensibility of organs of vision, III, 892.
- Allen, F. H., jun. See May, C. D.
- Allen, F. M., comparison of different preparations of amorphous and zinc crystalline insulin, III, 413. Transfusions and polycythæmia in normal and tumour-bearing rats, III, 508. Local asphyxia and X-ray irradiation of transplantable rat tumours, III, 509.
- Allen, F. W. See Schmidt, C. L. A.
- Allen, H. S., α - β transformation of quartz, I, 194.
- Allen, I. M., compulsive grasping, the grasp reflex, tonic innervation, and associated phenomena, III, 637.
- Allen, J. G., and Julian, O. C., clinical use of a synthetic substance resembling vitamin-K (2-methyl-1:4-naphthaquinone), III, 628.
- Allen, J. H. See Swan, K. C.
- Allen, J. S., and Williams, J. H., ion optics of a five-section proton-accelerating tube, I, 382.
- Allen, N., Charbonnier, H. Y., and Coleman, R. M., determination of polyalcohols in presence of each other, II, 319.
- Allen, O. P. See Miller, M. M.
- Allen, T. H., and Bodine, J. H., enzymes in ontogenesis. IX. Influence of solutes on activity of tyrosinase, III, 260.
- See also Bodine, J. H.
- Allen, V. T. See Wentworth, C. K.
- Allen, W. D., and Hurst, C., scattering of D-D neutrons, I, 338.
- Allenby, O. C. W. See Stevens, P. G.
- Allényi, A. See Goreczky, L.
- Aller, L. H., Baker, J. G., and Menzel, D. H., physical processes in gaseous nebulae. VIII. Ultra-violet radiation field and electron temperature of an optically thick nebula, I, 137.
- See also Baker, J. G.
- Alles, G. A., and Hawes, R. C., cholinesterases in human blood, III, 561.
- See also Haagen-Smit, A. J., and Prinzmetal, M.
- Allgood, R. W., Le Roy, D. J., and Gordon, A. R., variation of transference numbers of potassium chloride in aqueous solution with temperature, I, 324.

- Allibone, E. C. See Tunbridge, R. E.
- Allinne, M. See Dubost, P.
- Allinson, M. J. C., preparation and properties of soluble bacterial enzymes which decompose creatinine, III, 766.
- Allison, F. E. See Hoover, S. R., and Ludwig, C. A.
- Allison, H. W. See Wikoff, H. L.
- Allison, J. B., and Cole, W. H., nitrogen, copper, and haemocyanin content of sera of arthropods, III, 791.
- Glaser, C., and Leonard, S. L., relation of thyroid to creatine and creatinine excretion in rat, III, 407.
- See also Morris, M. L.
- Allison, R. S. See Campbell, S. B. B.
- Allison, S. K., Graves, (Miss) E. R., and Skaggs, L. S., α -particle groups from the disintegration of beryllium by deuterons, I, 140.
- Hatch, G. T., Skaggs, L. S., and Smith, N. M., jun., operating characteristics of a voltage-multiplying circuit for nuclear disintegration experiments, I, 235.
- Miller, Leonard C., Perlow, G. J., Skaggs, L. S., and Smith, N. M., jun., energy released in reaction ${}^6\text{Li} (p, \alpha) {}^3\text{He}$ and mass of ${}^3\text{He}$, I, 383.
- Allison, S. T., and Myers, R., sulphapyridine in pulmonary tuberculosis, III, 245.
- Allsopp, A., and Misra, P., constitution of cambium, new wood, and mature sawwood of common ash, common elm, and Scotch pine, III, 777.
- Allsopp, C. B., photo-oxides of carcinogenic hydrocarbons, II, 161.
- Almon, L., and Stovall, W. D., vi antibody content of sera of typhoid patients and carriers, III, 689.
- Almquist, H. J., and Klose, A. A., anti-haemorrhagic activity of 2-methyl-1:4-naphthaquinone, III, 147.
- and Mecchi, E., identification of rice factor; essential nature of glycine component, III, 820.
- Mecchi, E., Stokstad, E. L. R., and Manning, P. D. V., identification of rice factor, III, 673. Identification of rice factor; carbohydrate component, III, 752.
- and Stokstad, E. L. R., alleged intoxication factor in fish meal, III, 319.
- See also Klose, A. A.
- Almy, G. M., Fuller, H. Q., and Kinzer, G. D., fluorescence of diacetyl, I, 93.
- See also Fuller, H. Q.
- Aloisi, M., effect of 1:2:4-dinitrophenol on development and metamorphosis of amphibia, III, 373.
- and Polányi, V., deficiency in motor function of animals with avitaminosis-E, III, 431. Experimental muscular dystrophy in rats, III, 888.
- Aloisi, P., sources of error in determination of double refraction, I, 420.
- Alpern, D. E., chemical nature of nervous stimulation in man, III, 394.
- Alperovitch, C. B., breed, age, and sex variations in blood value of rabbits, III, 467.
- Alpers, B. J. See Appel, K. E.
- Alpert, B., juvenile diabetes mellitus treated with protamine-hexamine-insulin—a new combination, III, 209.
- See also Feinblatt, H. M.
- Alphen, J. van, aliphatic polyamines. IX. and X., II, 70, 103. Indigo. V. Benzimidazole derivative isomeric with indigo, II, 234.
- Alrich, (Miss) F. R. See Briggs, T. R.
- Alsever, J. B. See Gwynn, C. A.
- Alstead, S., potassium iodide and ipecacuanha as expectorants, III, 340. Expectorants in chronic bronchitis, III, 924.
- Alsted, G., exogenous pernicious anaemia, III, 182.
- Lundsteen, E., and Mogensen, E., 102 cases of lobar pneumonia treated with M. & B. 693, III, 520.
- Alt, H. L. See De Marsh, Q. B.
- Altberg, W., and Lavrov, V., crystallisation of water. II, I, 17.
- Altemeier, W. A., and Jones, H. C., X-rays and experimental peritonitis, III, 342.
- Altenburger, E., hormonal causation and therapy of enlarged prostate, III, 583.
- and Diehl, F., vitamin-C and basal metabolism, III, 145.
- Alter, C. M., and Thomas, D. S., jun., laboratory uses for surface-active agents, I, 445.
- Altergot, V. F., automyophagy, III, 74.
- Althausen, T. L., test for intestinal absorption, III, 219. Carbohydrate metabolism in hyperthyroidism, III, 894.
- Kerr, W. M. J., and Stockholm, M., calcium exchange of intestine in experimental hyperthyroidism, III, 208.
- Lockhart, J. C., and Soley, M. H., new diagnostic test (galactose) for thyroid disease, III, 408.
- See also Eiler, J. J.
- Altland, P. D., cytology of hypophysis of fence lizard, III, 301.
- Altman, F., significance of aphasia as a symptom of otogenic extradural abscess, III, 640.
- Altose, A. R. See Piness, G.
- Altschule, M. D., relation between prolonged P-R interval and auricular fibrillation in patients with rheumatic heart disease, III, 98. Adrenal apoplexy in a man of 72 following idiopathic thrombophlebitis of the adrenal veins, III, 306.
- and Budnitz, E., rheumatic disease of tricuspid valve, III, 794.
- and Iglauer, A., effect of benzedrine and paredrine (*p*-hydroxyphenyl- α -methyl-ethylamine hydrobromide) on circulation, metabolism, and respiration in normal man, III, 679.
- See also Blumgart, H. L., Gilligan, D. R., and Iglauer, A.
- Altshuler, S. S., Hensel, H. M., and Sahyun, M., maintenance of nitrogen equilibrium on amino-acids administered parenterally, III, 859.
- Alvarez, F. G., Orias, O., and Gallardo, J. B. S., diagnosis and treatment of adrenal deficiency, III, 643.
- Alvarez, L. W., neutron yields from deuteron reactions at high energy, I, 337. Search for short-lived radioelements, I, 339.
- and Bloch, F., quantitative determination of neutron moment in absolute nuclear magnetons, I, 143.
- and Brobeck, W. M., cloud-chamber studies in the cyclotron magnetic field, I, 308.
- Helmholz, A. C., and Nelson, E., isomeric silver and Weizsäcker theory, I, 279.
- Alvarez, W. C., maintaining nutrition in highly food-sensitive persons, III, 142. Can migraine in women be cured by inducing menopause? III, 798.
- See also Morlock, C. G.
- Alvarez-Tostado, C., convection effects in electrophoresis, I, 440.
- See also Jameson, E.
- Alving, A. S., and Miller, B. F., clinical method for inulin clearance, III, 910.
- See also Miller, B. F.
- Alwall, N., constipation and drugs of opium series, III, 63. Respiration of striated muscles *in vitro*, III, 196. Increase in citric acid metabolism *in vitro* by salicylate, III, 240.
- and Sylvan, S., effect of thyroxine and dinitrophenol on metabolism during urethane anaesthesia, III, 29.
- Alyea, H. N., simplified nomenclature for proton transfer concept of acids, I, 116.
- Alzamora, F. C., azoxylidine and the nitrites, I, 231.
- Amaki, T., Iimori, T., and Sugimoto, A., radio isotopes of chromium, I, 278. Artificial radioactivity of chromium, I, 384.
- Amaldi, E., Bocciarelli, D., Rasetti, F., and Trabacchi, G. C., scattering of neutrons from C + D reaction, I, 3.
- Amann, A., absorption of ferrous salts, III, 560.
- See also Straub, W.
- Amano, S., and Ando, T., behaviour of chromosomes in experimental hepatoma production, III, 669.
- Hagio, K., and Kyo, T., haematopoiesis in human foetus, III, 181.
- Amantea, G., and Famiani, V., vitamin-B₁ and constructive processes, III, 144.
- Amat, M., and Duclaux, J., ultrafiltration, IV, I, 23.
- Amberg, S., and Osterberg, A. E., dehydration of blood, III, 789.
- Amberson, W. R. See Oster, R. H.
- Ambler, T. S. See Flosdorf, E. W.
- Amdur, E. See Kolthoff, I. M.
- Amdur, L., and Pearlman, H., high-velocity atomic beams, I, 89.
- American Medical Association, treatment of blood disorders. I. Pernicious and other macrocytic anemias. II. Leukæmia, agranulocytosis, and neutropenia. III. Haemorrhagic diseases. IV. Polycythæmia, Hodgkin's diseases, and splenic disorders. V. Effects produced by drugs, III, 879. Treatment of diabetic emergencies, III, 898.
- Council on Pharmacy and Chemistry, status of picrotoxin in poisoning by barbiturates, III, 64. Therapy with chorionic gonadotropin, III, 662. Vitamin-E and habitual abortion, III, 809.
- Council on Pharmacy and Chemistry, and Council on Foods, vitamins, III, 49.
- Amies, C. R., antiserum and sulphapyridine in meningococcal infections, III, 861.
- and Carr, J. G., immunological experiments with highly concentrated suspensions of the Rous I tumour-producing agent, III, 45.
- See also McFarlane, A. S.
- Amin, K. C., interspecific hybridisation and use of colchicine in cotton, III, 616.
- Ammundsen, E., blood content of inactive hæmoglobin and hæmoglobin standardisation, III, 90. Presence of non-oxygen-combining (inactive) hæmoglobin in blood of normal individuals, III, 195.

- Amolsch, A. L., and Wax, J. H., histoplasmosis in infancy, III, 91.
- Amoroso, E. C., Griffiths, W. F. B., and Hamilton, W. J., living tubal ova of goat, III, 649. Living tubal ovum of horse, III, 649.
- Amos, G. L., and Wood, J. G., effect of variation in nitrogen supply and water content on amounts of carbohydrates in leaves of grass plants, III, 81.
- Amoureux, G. See Berthelot, A.
- Ampt, G. A. See McHenry, J. T.
- Amstutz, E. D. See Plucker, J., 3rd., and Ryan, J. F.
- Amtman, J. K. See Meyer, K. A.
- Amtman, L. See Meyer, K. A.
- Amuchastegui, S., red blood cell and white cell count in 100 adults in Córdoba, III, 281.
- Amundsen, L. H., laboratory experiments in organic chemistry. II.—IV. Preparation of lysidine, 2:3-dihydro-5:6-diphenylpyrazine, and 2:3-diphenylpyrazine, II, 109.
- Anagnostu, J., influence of vitamin-A on thrombocytes and bone marrow, III, 787.
- Ananthapadmanabhan, T. S. See Krishnan, K. S.
- Ancel, P., and Lallemand, S., specificity of teratogenic action of colchicine on chick embryos, III, 835.
- and Vintemberger, P., plane of bilateral symmetry of eggs of *Rana fusca*. I.—III, III, 86.
- Andersen, A. A., and Werkman, C. H., dextro-lactic acid-forming organism of genus *Bacillus*, III, 768.
- See also Wood, H. G.
- Andersen, A. G. H., alpha solubility limit and first intermediary phase in copper-silicon system, I, 155.
- Andersen, D. H., cystic fibrosis of pancreas and its relation to celiac disease, III, 37.
- See also Jarcho, S., and Kelsey, W. M., jun.
- Anderson, A. See Greaves, J. E.
- Anderson, A. K. See Matthews, J. E., jun.
- Anderson, A. L., aikinite and silver enrichment at the St. Louis mine, Butte Co., Idaho, I, 398.
- Anderson, B. G., new culture medium for paramacia, III, 351.
- Anderson, B. W., and Payne, C. J., korne-rupine from Ceylon; a new occurrence, I, 238.
- Payne, C. J., and Pike, J., new refractometers employing diamond and other minerals, I, 446.
- Anderson, C. D. See Neddermeyer, S. H.
- Anderson, C. E. See Irvin, J. L., and Tenery, R. M.
- Anderson, E., and Herring, V., effect of sodium chloride and deoxycorticosterone on body weight and carbohydrate stores of adrenalectomised rats, III, 643.
- Joseph, M., and Herring, V., changes in radioactive sodium, potassium, and in carbohydrate stores twentyfour hours following adrenalectomy, III, 411.
- Salt after adrenalectomy. I. Growth and survival of adrenalectomised rats given various levels of sodium chloride. II. Urinary excretion of radioactive sodium and potassium in adrenalectomised rats given various levels of salt, III, 846.
- Anderson, E., Lawrence, J. H., Joseph, M., and Aebersold, P. C., increased sensitivity of hypophysectomised rats to radiation, III, 120.
- Anderson, Ernest, Seeley, M., Stewart, W. T., Redd, J. C., and Westerbeke, D., origin and composition of hemicelluloses obtained from hardwoods, II, 324.
- Anderson, F. G. See Hertzog, A. J.
- Anderson, G. See North, E. A.
- Anderson, G. W., and Pollard, C. B., ω -amino-alcohols. I. 1-Phenyl-4- ω -hydroxyalkylpiperazines from ω -chlorohydrins (derivatives of piperazine. XVII.) II. Morpholino-alcohols (derivatives of morpholine. II.), II, 108, 110.
- Anderson, H. D., and Elvehjem, C. A., variations in blood-calcium and -phosphorus with age in dogs, III, 707.
- Elvehjem, C. A., and Gonce, J. E., jun., vitamin-E deficiency in dogs, III, 430.
- McDonough, K. B., and Elvehjem, C. A., relation of dietary calcium: phosphorus ratio to iron assimilation, III, 426.
- Anderson, H. H. See Forbes, G. S.
- Anderson, H. L. See Dunning, J. R.
- Anderson, H. V., and Hochgesang, F. P., copper sulphate-sodium silicate reaction, I, 264.
- Anderson, I. See Thomsen, O.
- Anderson, I. A., and Lyall, A., treatment of chronic hypoparathyroidism, III, 29.
- Anderson, J. See Shriner, R. L.
- Anderson, J. A., effect of relative humidity on skin and rectal temperatures of newborn infant, III, 929. Effect of relative humidity on insensible weight loss of newborn infant, III, 929.
- Anderson, L. E., staphylococcus ambo-toxoid, III, 76.
- Anderson, N. A., traumatic rupture of spleen in children, with special reference to left shoulder pain, III, 21.
- and Lyon, R. A., causes of prematurity, III, 739.
- Anderson, P. A., contact difference of potential between barium and zinc; external work function of zinc, I, 147.
- Anderson, R. C., and Chen, K. K., absorption and toxicity of sodium and potassium thiocyanates, III, 603.
- Anderson, R. J., and Creighton, M. M., chemistry of lipins of tubercle bacilli. LIX. Composition of polysaccharide of firmly bound lipins of leprosy bacillus, III, 170.
- Creighton, M. M., and Peck, R. L., chemistry of lipins of tubercle bacilli. LX. Firmly bound lipins of the avian tubercle bacillus, III, 613.
- See also Geiger, W. B., jun.
- Anderson, R. K. See Hubbard, R. S.
- Anderson, T. F., and Duggar, B. M., physiological changes produced in yeast by ultra-violet light and by heat, III, 160.
- and Roberts, J. I., macrocytic anæmias in Kenya, III, 557.
- Anderson, V. G., old and new systems for reporting inorganic constituents in natural waters, I, 393.
- Anderson, W. See Campbell, N.
- Anderson, W. A. D., and Bethea, W. R., renal lesions after hypertonic sucrose. III, 812.
- Andervont, H. B., possible causative factors of spontaneous adenomatous lesion of stomach in mice of strain I, III, 227. Development and genetic characteristics of adenomatous stomach lesion in strain I mice, III, 228. Susceptibility of five inbred strains of mice to liver changes induced by subcutaneous injection of 2-amino-5-azotoluene, III, 315.
- See also Brues, A. M., Lorenz, E., and Shimkin, M. B.
- Ando, S., isomerisation of cyclohexane under high pressure of hydrogen, II, 9.
- Ando, T., constitution of dehydroergopinacone, II, 43.
- See also Amano, S.
- Andrae, M. See Bierry, H.
- Andrade, E. N. da C., glide and hardening in metal single crystals, I, 247.
- Viscosity of liquids, I, 435.
- and Chow, Y. S., glide elements of body-centred cubic crystals, with special reference to effect of temperature, I, 349.
- Andreassi, G., morphology and nuclear structure of epithelium of human thyroid gland, III, 122. Structure of human thyroid, III, 406.
- Andreev, K. K., and Maslov, V. P., action of gas explosion on solid explosives, I, 167.
- Andreoni, R., effect of prolonged administration of folliculin to rabbits at various stages of the sexual cycle, III, 736.
- Andres, D. See Griswold, J.
- Andress, K. R., sodium polyphosphates, I, 124.
- Andrew, B. L., Davidson, J. N., and Garry, R. C., absorption of water from colon of rat under urethane anaesthesia, III, 907.
- Andrew, N. V. See Andrew, W.
- Andrew, W., origin and significance of binucleate Purkinje cells in man, III, 280.
- and Andrew, N. V., fatigue and ageing changes in mouse cerebral cortex, III, 719.
- and Cardwell, E. S., jun., neuronophagia in human cerebral cortex in senility and in pathologic conditions, III, 486.
- Andrews, C. H., occurrence of virus III in rabbits in lesions of infectious fibroma and of transplantable sarcoma, III, 507. Latent virus infections and their possible relevance to the cancer problem, III, 589.
- See also Harris, C. H. S.
- Andrews, A. C., physical chemistry of secalin; electrophoresis and diffusion constant studies of the prolamine of rye, I, 255.
- Andrews, C. H., closed intrapleural pneumonolysis, III, 195.
- Andrews, C. L., concave spherical crystals of barium copper stearate for use in long wave-length X-ray spectrometers, I, 271.
- Andrews, C. T., sulphapyridine in bacterial endocarditis, III, 331.
- Andrews, D. A., geology and coal resources of the Minot region, N. Dakota, I, 334.
- See also Parker, F. S.
- Andrews, F. H., and McKenzie, F. F., collection of follicular fluid from ovary of mare, III, 739.
- Andrews, W., Potter, R. M., Friedmann, T. E., and Livingstone, H. M., determination of ethyl ether in blood, III, 630.

- Andrianov, K. A., alkyl- and amyl-substituted silicic acid esters. IV. Hydrolysis and anhydridation of alkyltriethoxysilanes, II, 34.
- Andrieux, Jouvelet, Schmitt, and Leorecq, distribution of drinking water in Rennes, III, 258.
- Andrieux, J. L., and Chène, M., electrolytic preparation of molybdenum phosphides, I, 78.
- Andrus, E. C. See Hill, W. H. P.
- Andrus, M. B. See Fardon, J. C.
- Andrus, W. De W., and Lord, J. W., jun., 2-methyl-1:4-naphthaquinone in prothrombin deficiency, III, 559.
- Lord, J. W., jun., and Kauer, J. T., fate of plasma-prothrombin, III, 706.
- and Moore, R. A., lipin amino-nitrogen content of blood in diseases of liver and biliary tract, III, 666.
- Angelescu, E., lyophilic colloids, I, 211. Relations between electrical conductivity and degree of dispersion of lyophilic colloids. I. General, I, 211. Electrical conductivity of binary liquid systems, I, 218.
- and Ciortan, V., colloid chemistry of system soaps-cresol-water. IV. Viscosity of cresolated sodium stearate solutions in presence of free fatty acids, I, 71.
- and Szász, S., colloid chemistry of system soaps-cresol-water. V. Viscosity of stearate solutions in presence of electrolytes and cresol, I, 254.
- Vasilin, G., and Radvan, S., saponification of nitriles. I. Alkaline saponification of some disubstituted acetoneitriles, I, 222.
- and Woinarosky, A., relations between electrical conductivity and degree of dispersion of lyophilic colloids. II. Conductivity of solutions of sodium and potassium palmitates and stearates in presence of *o*-cresol, I, 211.
- Angeletti, A., ditolyl series. VIII, II, 166.
- Angeletti, S. See Schreiber, B.
- Angenetter, H., Zeeman effect in the xenon spark spectrum, Xc II, I, 305.
- Angla, B., preparation of semicarbazones by functional exchange, II, 243.
- Anglade, M., synthesis of 4-hydroxy-methyl-2- α -hydroxyethylanisole and its derivatives, II, 128.
- Anglem, T. J. See Pack, G. T.
- Angus, W. R., and Hill, W. K., diamagnetism and the hydrogen bond, I, 405.
- Angyal, A., and Blackman, N., vestibular reactivity in schizophrenia, III, 893.
- Anhagen, E., and Wendt, G., has lacto-flavinphosphoric acid a vitamin-B₆-like action? III, 514.
- Anisimov, K. N., and Nesmejanov, A. N., carbonyls of group VI metals. II, I, 298.
- Anker, H., menstrual disorders treated with follicular hormone, III, 903.
- Anning, C. C. P., nutrition of the people of Benoni, III, 671.
- Anosov, V. J., curve representing yield of undissociated compound in binary systems, I, 412.
- Ansbacher, S., new type of vitamin-K-deficient diets, III, 752.
- and Fernholz, E., vitamin-K activity in benzoquinone series, III, 147.
- Ansbacher, S., Fernholz, E., and Dolliver, M. A., vitamin-K-active derivatives of 2-methyl-1:4-naphthaquinol, II, 80. Water-soluble anti-hæmorrhagic compounds, III, 706.
- Fernholz, E., and MacPhillamy, H. B., natural and synthetic vitamin-K, III, 284.
- See also Fernholz, E.
- Anschütz, L., Kraft, H., and Schmidt, K., steric hindered halogen addition by triaryl phosphites, II, 42.
- Anslow, W. K., Breen, J., and Raistrick, H., biochemistry of micro-organisms. LXIV. Emodic (4:5:7-trihydroxy-anthraquinone-2-carboxylic) acid and ω -hydroxyemodin (4:5:7-trihydroxy-2-hydroxymethylanthraquinone), metabolic products of a strain of *Penicillium cyclopium*, Westling, II, 135. 1:3:8-Trihydroxyanthraquinone, II, 227.
- and Raistrick, H., biochemistry of micro-organisms. LXVII. Molecular constitutions of catenarin and erythroglucin, metabolic products respectively of *Helminthosporium catenarium*, Drechsler, and of species in the *Aspergillus glaucus* series, II, 311.
- Anson, B. J., Karabin, J. E., and Martin, J., stapes, fissula ante-fenestram, and associated structures in man. II. From the fetus at term to the adult of seventy, III, 26.
- and Wilson, J. Gordon, structure of petrous portion of temporal bone, with special reference to tissues in fissular region, III, 205.
- See also Beaton, L. E., McDonald, J. J., and McVay, C. B.
- Anson, M. L., denaturation of proteins by synthetic detergents and bile salts, III, 160. Reactions of denatured ovalbumin with ferricyanide, III, 160. Reactions of iodine and iodoacetamide with native ovalbumin, III, 531. Thiol groups of ovalbumin, III, 930.
- Anspach, W. E., and Clifton, W. M., hyperparathyroidism in children, III, 726.
- Ant-Wuorinen, J., separation of rare earths by electrolytic hydrolysis of their azides, I, 392. Formation of double fluorides of thallium with fluorides of quinevalent metalloids and metals of the nitrogen group, I, 393.
- Antener, I. See Woker, G.
- Antes, S., protective function of skin against action of acids, III, 314.
- Anthony, A. J., regulation of respiration, III, 194. Gas analysis with Zeiss interferometer, III, 295.
- and Broglie, M., limitation of diaphragmatic movements, III, 194.
- and Rohland, R., automatic control of oxygen content in spirometer, III, 326.
- Antoine, G., and Regnier, M. T., relationship between physiological properties and physical characters of trivalent arsenicals, III, 526.
- Antonescu-Mazilu, F. See Papilian, V.
- Antonov-Romanovski, V., and Kotscherigin, G., decay of alkali halide phosphors activated by thallium, I, 96.
- Antopol, W., Applebaum, I. L., and Goldman, L., acute hæmolytic anæmia after sulphanimide, III, 7.
- and Churg, J., significance of urinary chlorides in cases of pneumonia treated with sulphapyridine, III, 667.
- Antopol, W., Glaubaeh, S., and Glick, D., choline-esterase activity in various portions of rabbit heart, III, 98. Choline-esterase activity in blood serum and duodenum of beriberi pigeons, III, 448.
- and Glick, D., histochemistry. XV. Histological distribution of choline-esterase in the adrenal gland, III, 347. Choline-esterase and esters of thiamine, III, 347.
- and Robinson, H., pathologic and histologic changes following oral administration of sulphapyridine and sodium sulphapyridine, III, 332.
- and Schotland, C. E., vitamin-B₆ in pseudohypertrophic muscular dystrophy, III, 568.
- and Unna, K., pathology of vitamin-B₆ deficiency in rat and response to 3-hydroxy-2-methyl-4:5-di(hydroxymethyl)pyridine, III, 234.
- See also Finkler, R. S., Seudi, J. V., and Unna, K.
- Antropoff, A. von [with Proppe, H., Kalthof, F., Schmitz, L., Steinberg, F., and Schaeben, L.], adsorption of gases by active charcoals from lowest to the highest pressures, I, 208.
- Anzo, S. See Kawase, K.
- Aoki, A. See Shimamura, M.
- Aoki, I. See Ishikawa, F.
- Aoyama, S., and Fukuroi, T., fine structures in K-absorption edges of iron at low temperatures, I, 184.
- Apgar, C. S., jun., practical operating stand, III, 84.
- Appel, J. W., and Hughes, J., effect of large doses of insulin on glucose tolerance, III, 754.
- Appel, K. E., Alpers, B. J., Hastings, D. W., and Hughes, J., central nervous system changes produced by insulin, III, 486.
- Appel, M. See Eisenstaedt, J. A., Necheles, H., and Saphir, O.
- Applebaum, I. L., respiratory defence mechanism: its relationship to pulmonary diseases, III, 194.
- See also Antopol, W.
- Appleton, J. L. See Brode, W. R.
- Arai, M., spontaneous tumours in white rats, III, 670.
- Arakawa, H. See Nishina, Y.
- Arakawa, S. See Yaoi, H.
- Araki, G. See Tomonaga, S.
- Araki, J. See Ishikawa, S.
- Arao, Y. See Fujino, K.
- Arata, Y. See Asano, M.
- Arbesman, C. E., and Egle, H., assay of ragweed pollen extracts, III, 255.
- Arbor, A. See Sheldon, J.
- Arbusov, J. A. See Zelinski, N. D.
- Arbuzov, E. A., Abramov, V. S., and Deviatov, J. B., products of condensation of cyclones with *p*-benzoquinone and α -naphthaquinone, II, 49.
- Arcangeli, E. F., synthesis of 1-keto-2:3-dimethylnaphthindene, II, 224.
- Arcey, G., and Marcot, M., application of surface tension measurements to determination of double salts in solution, I, 69.
- Archangelskaja, R. A. See Lichoschertstov, M. V.
- Archbold, H. K., invertase activity of barley, III, 609. Fructosans in the monocotyledons, III, 777.
- Archer, S., Walden inversion and the Hofmann rearrangement, II, 329.
- See also Simons, J. H.

- Archibald, W. J., specific heat of a monoatomic liquid, I, 16.
- Arcus, C. L., and Smith, J. W., mechanism of hydrolysis of α -dimethylallyl chloride, I, 30.
- and Zilva, S. S., photochemical decomposition of l-ascorbic acid. II, III, 235.
- Arday, E. G. R., Bowman, W. H., and Weatherburn, A. S., oxidation of thio-phen-sulphur by calcium hypochlorite solutions, I, 268.
- Ardenne, M. von, single-crystal fluorescent screen and supermicroscopy, I, 82. Resolving power of photographic film for electronic radiation, I, 227. Electron supermicroscope, I, 376. Universal electron microscope for light- and dark-field and stereoscopic operation, I, 376. Investigation of living matter with the electron microscope, III, 159.
- and Beischer, D., study of metallic oxide smokes with the universal electron microscope, I, 356. Investigation of catalysts with the universal electron microscope, I, 366.
- Ardoit, P. See Cahen, R.
- Arellano, E. R., simplification of rules concerning planes and directional sense of any nystagmus consequent on rotation of the head; explanation of the purpose of nystagmus, III, 119.
- Arena, H. M. See Hamblen, E. C.
- Arenas, N., and Sammartino, R., sexual cycle of bitch: histological study, III, 660.
- See also Sammartino, R.
- Arenz, B., and Schropp, W., boron and Gramineae, III, 546. Effect of boron on growth of field beans receiving varied proportions of nitrogen and potassium, III, 546. Effect of boron on carrots, sunflower, and buckwheat, III, 546.
- Argument, C. See Gibby, C. W.
- Arhesman, C. E., and Eagle, H., thermolability of ragweed pollen extract and its corresponding reagin, III, 339.
- Arief, A. J., effect of sodium bromide on nutrition and gastro-intestinal tract of epileptic patients, III, 65.
- See also Stone, T. T.
- Arii, K., sorption of chlorine by active charcoal. III. Sorption isotherms at low pressure, I, 319.
- Arimori, T., preparations of pure alumina from Manchurian clay. IX. Preparation of the crystalline hydrate of aluminium hydroxide, I, 369.
- Aring, C. D., flaccid hemiplegia in man, III, 721.
- Evans, J. P., and Spies, T. D., neurological signs of vitamin-B deficiencies, III, 428.
- See also Lewy, F. H., and Vilter, R. W.
- Arisz, W. H., and Dijk, P. J. van, value of plasmolytic methods in demonstrating active asparagine intake of *Vallisneria* leaves, III, 80.
- Ariyama, K., conductivity of metals, I, 244.
- Ark, P. A., bacterial leaf spot of maple, III, 353.
- Arkadiev, V. K., and Veletskaja, O. I., continuous passive spectra, I, 245.
- Arkin, A., and Popper, H., urea reabsorption in renal disease, III, 503.
- Arloing, F. See Berard, L.
- Armentano, L., vitamin-C requirement [of man], III, 594. Action of ascorbic acid in hemorrhagic diathesis, III, 890.
- Armitage, F. L., modified peroxidase stain for blood and bone marrow films, III, 5.
- Armstrong, C. See Haas, V. H.
- Armstrong, C. W. J., and Fisher, K. C., comparison of effects of azide and cyanide on frequency of embryonic fish heart, III, 840.
- See also Cleghorn, R. A.
- Armstrong, D. W., and Brackett, F. S., spectroscopic analysis of biological fluids for heavy metals, III, 84.
- Armstrong, E. V., and Lukens, H. S., Lazarus Ercker and his "Probierebuch"; Sir John Pettus and his "Fleta Minor," I, 177.
- Armstrong, H. G., and Heim, J. W., effect of acceleration on living organism, III, 635.
- Armstrong, J. G. See McGuinness, A. C.
- Armstrong, S. H., and Rioch, D. McK., spinal pathways for nictitating membrane reflexes in the cat, III, 198.
- Armstrong, T. G. See Day, T. D.
- Armstrong, W. D., *in-vitro* experiments on exchange of phosphate by enamel and dentine, III, 755.
- Arndt, F., Loewe, L., and Ozansoy, M., behaviour of the SMe group during the methoxyl determination, II, 112.
- Arnell, J. C. See Parlee, N. A. D.
- Arneth, J., white cells with Auer "rods" in acute leukaemia, III, 7.
- Arnett, E. F. See Griswold, J.
- Arnett, J. H., hamaturia with sulphathiazole in pneumonia, III, 921.
- Arney, S. E. See James, W. O.
- Arnfelt, H. See Nydahl, F.
- Arnfelt, M., setting crystals for single-crystal X-ray photographs, I, 271.
- Arnold, A., and Elvehjem, C. A., nutritional requirements of dogs, III, 47. Is running fits a deficiency disease? III, 48.
- See also Black, T. L., and Weinstock, H. H., *jun*.
- Arnold, G. B. See Washburn, E. R.
- Arnold, H., synthesis of choline β -glycerophosphate, II, 265. Chaulmoogra phosphatides, II, 277.
- Arnold, J. E., and Goodeve, C. F., coefficient of thixotropy of suspensions of carbon black in mineral oil, I, 320.
- Arnold, L., bactericidal action of pectin and metal pectinates, III, 61. Influence of ingestion of nickel pectinate on growth of young rats, III, 143.
- See also Meyer, Esther.
- Arnold, O., and Hamperl, H., pharmacological properties of 4:4'-dihydroxy- $\alpha\beta$ -diethylstilbene, III, 581.
- Arnold, R. T., Collins, C., and Zenk, W., low-temperature dehydrogenations. II, II, 209.
- and Evans, R. L., aromatic ethylenic linkings: Mills-Nixon problem, II, 166.
- and Larson, R., quinones by the peroxide oxidation of aromatic compounds, II, 283.
- Peirce, G., and Barnes, R. A., steric inhibition of resonance, I, 353.
- Arnon, D. I., vitamin-B₁ in relation to the growth of green plants, III, 942.
- and Stout, P. R., essentiality of elements in minute quantity for plants with special reference to copper, III, 546.
- See also Stout, P. R.
- Arnott, W. M., and Matthew, G. D., nature of arteriolar hypertonicity in acute glomerulo-nephritis, III, 292.
- Arnoult, R., β - and γ -radiations from active deposit of thoron, I, 52.
- Arnou, L. E., Burns, J., and Bernhart, F. W., phenylalanine content of hen's egg-albumin, III, 43.
- and Opsahl, J. C., partial racemisation of glutamic acid in boiling hydrochloric acid solutions, II, 246. Racemisation of glutamic acid by heat, II, 325. Attempted characterisation of malignant tissue protein with d-amino-acid oxidase, III, 747.
- Opsahl, J. C., and Watson, C. J., configuration of glutamic acid isolated from subacute lymphatic leukaemic tissue-proteins, III, 745.
- See also Clark, W. G.
- Arnulf, A., Chalonge, D., and Déjardin, G., distribution of energy in continuous spectrum of the sun between 4500 and 3300 Å, I, 184.
- Aron, H. C. S., relation of vitamin-C deficiency to nutritional anaemia, III, 324.
- See also Farmer, C. J.
- Aron, M., and Kayser, C., endocrines in hibernation induced by temperature changes, III, 401.
- Aronovitch, P. M. See Lukin, A. M.
- Aronson, J. D., and Mernanz, D. R., effect of antispyphilic treatment on histopathology of local tuberculous lesions in syphilitic rabbits, III, 526.
- Arthur, P., *jun*. See Norris, J. F.
- Arthus, A., Provoost, M., and De Sacy, G. S., immunisation by paravenoms, III, 444.
- See also Gaumé, A., and Lourau, M.
- Arton, C., and Freeman, J. A., phospholipins in rabbit plasma after fatty meals, III, 821.
- Artzimovitch, L., and Bredov, M., radiative stopping (Bremsstrahlung) of fast electrons in thin layers, I, 185.
- Aruja, E. See Perlit, H.
- Arvanitaki, A., analytical study of oscillatory electric response in isolated axon of *Sepia*, III, 198. Local oscillatory response of isolated giant axon of *Sepia*, III, 391.
- and Cardot, H., four possible types of electric response to galvanic stimulation in isolated giant axon of *Sepia*, III, 198.
- Asahina, Y., constitution of usnic acid, II, 101.
- Nakamura, Harukiti, and Ukita, T., temisin. I, II, 330.
- and Nogami, H., constitution of dihydroxy-homophthalic and -terephthalic acid derived from triethyl orcinol-tricarboxylate, II, 252. Synthesis of formylphenacetyl tropine, II, 360.
- Asai, C., photoconductivity of semi-conducting layers composed of heavy-metal sulphide or selenide. I. Relation between spectral sensitivity and light absorption in the photoconducting layer composed of cadmium selenide and the microscopic examinations of its structure in relation to its photoconductivity. II. Microscopic examinations of the semi-conducting layer composed mainly of thallous sulphide in relation to its photoconductivity, I, 244.
- Asakawa, H., effect of harmine, harmaline, and bulbocapnine on the glutathione content of liver, spleen, and blood of rabbits, III, 155. Effect of strychnine compounds on glutathione content of liver, spleen, and blood of rabbits, III, 155.

- Asami, K. See Fujikawa, F.
 Asami, N. See Umezui, M.
 Asakari, Y., and Hori, T., spectrum of the torch discharge, I, 50.
 Asano, M., and Arata, Y., lichen pigments of pulvic acid series. VII. Reduction of vulpic acid, II, 230.
 and Azumi, T., mesomethyltetradecylsuccinic acid, II, 152.
 and Huziwaru, S., lichen pigments of pulvic acid series. VI. Synthesis of atromentic acid, II, 230.
 and Kameda, Y., hydroxyquinones. I. Synthesis of dyes of the polyporic acid series, II, 226.
 and Taniguti, M., constituents of *Nephromopsis stracheyi*, f. *ectocarpitima*, Hue, III., II, 228.
 and Yamaguti, K., constitution and synthesis of embelin, II, 226.
 Asano, Y. See Ishii, C.
 Asatiani, and Kuntschulia, biochemical changes caused by training, III, 529.
 Ascham, J. K. See Schneider, H. A.
 Ascham, L., Speirs, M., and Maddox, D., availability of iron in dried peas and beans, III, 319.
 Aschkenasy, A., basal metabolism in disorders of blood and spleen, III, 556. See also Emile-Weil, P.
 Aschoff, L., colloid-chemical structure of gallstones, III, 221.
 Aschtscheulov, A. T., anomalous physical properties of thin silver films, I, 14.
 Asdell, S. A. See Babcock, M. J., and Bogart, R.
 Asenjo, A., action of cervical sympathetic on production of electrical potentials by cerebral cortex, III, 201.
 Asenjo, C. F., antihelmintic activity *in vitro* of fresh pineapple juice, III, 333. See also Berger, J.
 Ash, H., new tube clamp, III, 462.
 Ashburn, L. L., effect of administration of pantothenic acid on histopathology of filtrate factor deficiency state in rats, III, 915.
 Ashby, W. R., notes on centrifuge, III, 618.
 Ashcraft, E. B., electrochemical methods in microchemistry, I, 370.
 Ashe, W. F. See Spies, T. D.
 Asher, T. See Trautmann, A.
 Asheshov, I. N., sterile filtration of small amounts of fluid, III, 945.
 Ashford, C. A., adrenaline content of adrenal glands in diphtheria intoxication, III, 30.
 See also Wilkinson, J. F.
 Ashford, W. R., and Clark, R. H., comparison of colorimetric methods for determination of nicotinic acid, II, 200.
 Ashikari, H., oestrogenic substance in rice germ, III, 810. Biochemical studies on α -scymnolsulphonic acid, III, 851.
 Ashley, C. See Cuyler, W. K., and Hamblen, E. C.
 Ashley-Montagu, M. F., location of porion in the living, III, 4. Anthropological significance of musculus pyramidalis, III, 179. Relations between physical and social anthropology, III, 554. Physiology and origins of menstrual prohibitions, III, 738. Medio-palatine bones, III, 833.
 Ashman, R., Wilde, W. S., and Drawe, C. E., validity of electrical doublet theory of cardiac action current, III, 563.
 and Woody, N. C., monophasic action currents from uninjured turtle ventricle, III, 98.
 Ashworth, J. See Sutton, D. C.
 Ashworth, U. S., proteolytic enzymes and protein storage, III, 237.
 Asikari, H. See under Ashikari, H.
 Askanazy, M., leukaemia and tumours, III, 183.
 Askenasy, H. See Jonesco-Sisesti, M.
 Askew, F. A., and Danielli, J. F., measurements of pressures due to monolayers at oil-water interfaces, I, 356.
 Askew, H. O., cobalt deficiency at Glenhope, Nelson, New Zealand, III, 49.
 Asmis, H., vitamin-C deficiency, III, 430.
 Asmus, E., viscosity of mixed aqueous solutions of strong electrolytes with special reference to theory of Onsager and Fuoss, I, 106.
 Asmussen, R. W., investigations. III. Nitrosyl chloride and its compounds with inorganic chlorides. IV. Magneto-chemistry of complex antimony compounds of principal valency four, I, 59, 102.
 Asperger, H., and Goll, H., hemichorea in mono-ovular twins, III, 890.
 Aspinall, S. R., preparation and cyclisation of monoacylethylenediamines. II., II, 25. Synthesis of monoketopiperazines, II, 289. Synthesis of tetrahydropyrimidines, II, 358.
 Ass, T. V., Batalin, A. C., and Sehtscherbakov, I. A., heat of oxidation of iodide ion by potassium dichromate, I, 217.
 Asselin, F. J., and Rohman, F. A., corrosion of copper by sodium halide solutions, I, 369.
 Astbury, W. T., hydrogen bond in protein structure, I, 404.
 and Bell, F. O., molecular structure of the collagen fibres, I, 199.
 Astin, A. V. See Curtiss, L. F.
 Aston, F. W., Bohr, N., Hahn, O., Harkins, W. D., Joliot, F., Mulliken, R. S., and Oliphant, M. L., fifth report of the Committee on atoms of the International Union of Chemistry, I, 426.
 Aston, J. G., and Doty, P. M., calculation of the heat capacity and entropy of methylamine from spectroscopic data alone; torsional mode of vibration, I, 435.
 and Kennedy, R. M., hindered internal rotation of methyl groups; entropy of silicon tetramethyl, I, 435.
 Kennedy, R. M., and Schumann, S. C., heat capacity and entropy, heats of fusion and vaporisation, and the vapour pressure of isobutane, I, 406.
 and Messerly, G. H., heat capacity and entropy, heats of fusion and vaporisation, and the vapour pressure of *n*-butane, I, 406.
 See also Messerly, G. H.
 Astrup, T., autocatalysis and blood coagulation, III, 10. Heparin and inhibition of blood-clotting, III, 10.
 See also Fischer, Albert.
 Astwood, E. B., and Fevold, H. L., action of progesterone on gonadotropic activity of pituitary, III, 215.
 See also Talbot, N. B.
 Asundi, R. K., and Vaidya, B. K., flame and are spectra of calcium and strontium salts, I, 137.
 Aszödi, Z., and Sas, L., sugar consumption of normal, C-hypervitaminotic, and scorbutic guinea-pig hearts, III, 53.
 Atanasiu, I. A., and Babor, M., ceric phosphate, I, 127. Extraction of cerium from monazite earths, I, 127.
 Atanasiu, I. A., and Belcot, C., electrolytic nitration of aromatic hydrocarbons. I. Nitration of xylene in methylalcohol. II. Nitration of benzene and toluene in methyl alcohol. III. Nitration of xylene, toluene, and benzene in aqueous medium, II, 39.
 and Velculescu, A. I., electrometric titration of precipitation reactions in mixtures of water and organic solvents, I, 131.
 Atchley, D. W. See Ferree, J. W., and Kuhlmann, D.
 Aten, A. H. W., Boerlage, (Miss) L., and Garssen, J. E., glass electrodes, I, 235.
 Athias, and Dias, F., atypical cells in sarcomas produced by methylcholanthrene, III, 422.
 Atkin, L. See Schultz, A. S.
 Atkins, O. A. See Johnston, C. N.
 Atkinson, A. J. See Berman, A. L., and Schmidt, C. R.
 Atkinson, D. W., erythroblastic anaemia (Cooley), III, 182. Experimental and clinical trials of stilbestrol, III, 849.
 Atkinson, E. R., atomic hypothesis of William Higgins, I, 177.
 and Lawler, H. J., direct synthesis of resolvable diaryls, II, 309.
 Atkinson, F. R. B., Von Gierke's disease, III, 518. Lederer's anaemia, III, 627.
 Atkinson, M., simple quantitative method of testing vestibular function, III, 205. Vertigo, III, 484.
 Atkinson, N., serology of tobacco mosaic virus. I. Agglutination reaction with homologous antisera, III, 358.
 Atlas, L. N., oscillography in arteriosclerosis, III, 842.
 Atmar, R. C., familial eosinophilia, III, 880.
 Atsuki, K., and Takata, T., xanthates. II. Sodium ethylthioxanthate and its reactions with metals. III. Mechanism of xanthation, II, 322.
 Atwell, W. J., and Taft, J. W., functional transplants of epithelial hypophysis in three species of *Amblystoma*, III, 729.
 Atzori, B., effect of mixed solutions of atropine and pilocarpine on the pupil, III, 61.
 Aub, J. C. See Brues, A. M.
 Auber, L., colour-producing structure in "dominant grey" budgerigar, III, 465.
 Aubertin, E., Lacoste, A., and Castagnou, R., effect of injections of haemoglobin solutions, blood, and serum on oxygen capacity of blood following haemorrhage, III, 285. Toxic effect of haemoglobin injected intravenously in the dog, III, 285. Iron content of organs of dogs following intravenous haemoglobin injection, III, 287.
 Lacoste, A., and Saric, R., blood-sugar-regulating rôle of spleen, III, 13.
 and Martinet, R., effect of experimental nephritis and hepatitis on blood-nitrogen of dog, III, 560.
 See also Lacoste, A.
 Aubry, J. See Travers, A.
 Aubry, M., surface and interfacial tensions of solutions of cyanines, I, 22.
 and Giraud, J. C., sound-masking for hearing tests, III, 26.
 Auchincloss, H., and Haagensen, C. D., breast cancer possibly induced by oestrogen, III, 736.
 Auchincloss, R., and Haagensen, C. D., failure of wheat-germ oil to produce neoplasms, III, 423.
 Aude, R. M. See Johnson, E. R.

- Audrieth, L. F. See Sisler, H. H.
- Audubert, R., application of the Debye-Hückel theory to disperse systems, I, 114.
- De Pirosky, R. R., and Damianovich, H., helium and the rare gases: emission of ultra-violet rays in the thermal decomposition of helium-platinum compounds, I, 79.
- and Racz, C., mean life of electronically activated nitrogen, I, 283.
- Andus, L. J., mechanical stimulation and respiration in the green leaf. II. Angiospermic species. III. Effect of stimulation on rate of fermentation, III, 616, 692.
- Auer, J., and Seager, L. D., simultaneous observations of pancreatic and biliary papillae of rabbit, III, 37.
- Auerbach, C. See Crew, F. A. E.
- Auersbach, K. See Thaddea, S.
- Aufdemgarten, H., the so-called induction process in carbon dioxide assimilation [by plants], III, 941.
- Auffret, C., determination of vitamin-B₁ and -B₂ in human tissues and foodstuffs in Indo-China, III, 750.
- Aufrecht, W. See Feigl, F.
- Auger, P. [with Ehrenfest, P., Maze, R., Daudin, J., Robley, and Fréon, A.], extensive cosmic-ray showers, I, 190.
- Grégoire, R., Maze, R., and Goldschmidt, B., changes of intensity and composition of cosmic rays with magnetic latitude, I, 54.
- and Grivet, T., deep [cosmic] rays, I, 189.
- Auger, W. J., culturing sputum on solid media using carbon dioxide for isolation of pneumococci, III, 264. Results of typing pneumococci from sputum from 450 cases of pneumonia among infants and children, III, 264.
- See also Silverthorne, N.
- Augier, P., Diesnis, J., and Raybaut, M., pancreatic secretion in gastro-duodenal ulcers, III, 310.
- Anll, J. C., and Kinard, F. W., determination of tungsten in biological materials, III, 872.
- Aumann, K. W., and Youmans, W. B., quantitative comparison of responses of isolated and of intact intestine to seven sympathomimetic amines, III, 134.
- See also Youmans, W. B.
- Aumüller, W. See Ehrhart, G.
- Austen, A. E. W., and Whitehead, S., electric strength of solid dielectrics, I, 434.
- Austen, D. C. See Cleghorn, R. A.
- Austin, F. L. See Evans, H. M.
- Austin, G. J., group separation for quantitative and qualitative analysis of phosphates, I, 393.
- Austin, J. A. See Brown, H. P.
- Austin, J. B., Saini, H., Weigle, J., and Pierce, R. H. H., direct comparison on a crystal of calcite of the X-ray and optical interferometer methods of determining linear thermal expansion; evidence of differences among calcite crystals, I, 315.
- Austoni, G., smooth muscle of large intestine, III, 1. Inguino-femoral region, III, 177.
- Austoni, M. E., and Greenberg, D. M., iron metabolism studied with the aid of its artificial radioactive isotope; absorption, excretion, and distribution of iron in rats on normal and iron-deficient diets, III, 755.
- Austoni, M. E., Rabinovitch, A., and Greenberg, D. M., iron content of tissues of normal, anæmic, and iron-enriched rats freed from blood by viviperfusion, III, 749.
- Austregesilo, A., vitamins and nervous system, III, 20.
- Austrian, R. See Gemmill, C. L.
- Auwärter, M., rhodium mirrors, I, 271.
- Avakian, S. See Burger, A.
- Avenarius, R. See Clar, E.
- Averbuch, S. B., constrained syneresis of gelatin gels. I, I, 212.
- Averill, F. J. See Haworth, W. N.
- Avery, G. S., jun., alcohol extraction of growth hormone from plant tissue, III, 460.
- Creighton, H. B., and Hock, C. W., low-cost chamber for phytohormone tests, III, 460.
- and La Rue, C. D., growth and tropic responses of excised *Avena* coleoptiles in culture, III, 174.
- and Sargent, G. B., effect of various compounds on straight growth of the *Avena* coleoptile, III, 459.
- Avery, T. B., Scott, H. M., and Conrad, R. M., blood-calcium levels of fowl following injections of theelin, III, 735.
- Avrami, M., kinetics of phase change. I. General theory. II. Transformation-time relations for random distribution of nuclei, I, 122, 223.
- Avrin, I. See Erickson, B. N.
- Awbery, J. H., and Griffiths, E., thermal capacity of pure iron, I, 153. Specific heat of liquid methyl chloride, I, 435.
- Axe, W. N., and Bailey, J. R., nitrogen compounds in petroleum distillates. XV. Countercurrent acid extraction of kero bases; isolation of 2:4-dimethyl-8-n-propylquinoline, II, 24.
- Axelrod, A. E., and Elvehjem, C. A., determination of co-enzyme I in animal tissues, III, 73.
- Gordon, E. S., and Elvehjem, C. A., relationship of dietary intake of nicotinic acid to co-enzyme I content of blood, III, 594.
- Madden, R. J., and Elvehjem, C. A., effect of nicotinic acid deficiency on coenzyme I content of animal tissues, III, 52.
- Sober, H. A., and Elvehjem, C. A., reduction of *d*-amino-acid oxidase content of rat tissues in riboflavin deficiency, III, 144. *d*-Amino-acid oxidase content of rat tissues in riboflavin deficiency, III, 764.
- See also Hovorka, F.
- Axelrod, B. See Balls, A. K.
- Axelrod, J., and Swift, E. H., extraction of ferric iron from hydrochloric acid solutions by dichloroethyl ether and the formula of the iron compound in the ether, I, 108.
- Axelrod, M. B. See Tschumanov, S. M.
- Axelsson, J., stimulating action of the protein of animal feeding-stuffs, III, 913.
- Axon, P. E., polish layers on nickel, I, 287.
- Aycock, W. L., subclinical endocrinopathy as factor in autarecological susceptibility to poliomyelitis, III, 737.
- Ayer, A. A., morphology of iliofemoral ligament, III, 697.
- Ayer, D., renal lesions associated with deep jaundice, III, 813.
- Ayer, W. D. See Ecker, A. D.
- Aykroyd, O. E. See Gatenby, J. B.
- Aykroyd, W. R., and Krishnan, B. G., defects of tapioca as staple food, III, 142. Value of calcium lactate for Indian children, III, 319.
- and Swaminathan, M., nicotinic acid content of cereals and pellagra, III, 819.
- Aylesworth, F. A., definition of blindness and standards for sight-saving classes, III, 204.
- Aylward, F. X., Mainwaring, B. R. S., and Wilkinson, J. F., preservatives and stored blood, III, 628.
- See also Wilkinson, J. F.
- Aynard, R. See Cabannes, J.
- Ayoub, H., coloboma of macula, III, 639.
- Ayres, G. H., and Vienneau, E. M., stability of peroxidised titanium solutions, I, 228.
- See also Willard, H. H.
- Ayres, V. L., mineral notes from the Michigan iron country, I, 379.
- and Higgins, W. D., differentiation in xenolithic lamprophyre dykes at Marquette, Michigan, I, 85.
- Ayyar, P. R. See Mehta, D. R.
- Azarkh, R. M. See Braunstein, A. E.
- Aziz, S. A., Raman spectrum of diphenyl in the solid state, I, 196.
- Azmy, S., and Zanaty, A. F., pernicious anemia in Egypt, III, 183.
- Azorlosa, J. See Young, W. G.
- Azumi, T. See Asano, M.

B.

- Baader, E. W., severe manganese poisoning in Egyptian manganese miners, III, 155.
- Baar, H. S., and Lloyd, T. W., life span of red corpuscles and maturation time of reticulocytes, III, 376.
- Baarle, F. van. See Bogaert, A. van.
- Baba, T., fermentation of cassava starch by bacteria, III, 826.
- Babad, P., effect of adrenal cortex hormones on digestive absorption of proteins and on nitrogen retention during growth, III, 410. Action of adrenal cortex hormones on endogenous nitrogen excretion, III, 410. Adrenal cortex hormones and creatinuria of starvation, III, 410.
- See also Terroine, E. F.
- Babaeva, A. V., oxidation of complex compounds of platinum with hydrogen peroxide, I, 37. Oxidation of complex compounds of bivalent platinum with hydrogen peroxide, I, 37. Absorption spectra of complex compounds. I, I, 242.
- Babajan, A., Akopjan, B., and Giuli-Kevchjan, R., synthesis of acetylene γ -glycols, II, 34.
- Babb, D. C. See Polvogt, L.
- Babcock, M. J., Bogart, R., Sperling, G., and Asdell, S. A., effect of breeding conditions on the reproductive efficiency of albino rat, III, 850.
- Babcock, R. S. See Suntzeff, V.
- Babcock, S. H., jun., and Jukes, T. H., biological activity of synthetic pantothenic acid, III, 751.
- See also Daft, F. S.
- Babička, J. See Kořinek, J.
- Babkin, B. P., gastric secretion, III, 35.
- Hebb, C. O., and Sergeyeva, M. A., parasymphathetic-like effect of splanchnic nerve stimulation on pancreatic secretion, III, 134.

- Babkin, B. P., Komarov, O., and Komarov, S. A., effect of activated ergosterol and of parathyroid hormone on gastric secretion in the dog, III, 500.
- Babko, A. K., application of internal complex compounds in colorimetry; (determination of aluminium with the aid of aurintricarboxylic acid), I, 270.
- Babor, M. See Atanasiu, I. A.
- Baca, D. E. See Wilhelmj, C. M.
- Bacal, H. L. See Struthers, R. R.
- Baccaredda, M., and Beati, E., electron diffraction of hydrates of tervalent metals, I, 151.
- Baccari, V., decarboxylation of acetoacetic acid by normal and diabetic blood, III, 12.
- Bach, R. See Mackie, T. T.
- Bach, S. J., mechanism of urea formation, III, 40.
- Bacharach, A. L., vitamin-A-free basal diets, III, 512. Vitamin-free diets for animal experiments, III, 749. Vitamin-E and habitual abortion, III, 809. Effect of ingested vitamin-E (tocopherol) on vitamin-A storage in liver of rat, III, 916.
- See also Macfie, J. M., and Madinaveitia, J.
- Bachelet, M., effect of p_H in co-precipitation and concentration of radio-elements, I, 36.
- Bacher, R. F. See Tomboulou, D. H.
- Bachman, C., photometric determination of oestrogens. I. Modified Kober reaction for determining total oestrogens in a mixture of oestrogenic steroids. II. New colour reaction for oestriol, II, 43.
- See also Gurin, S.
- Bachman, I., tie-lines in ternary liquid systems, I, 164. Convergence of tie lines in ternary liquid systems, I, 257.
- Bachman, L. W. See Palmer, G. D.
- Bachmann, G. See Haldi, J.
- Bachmann, W., and Mielke, H., virulence and toxin content of pathogenic and non-pathogenic strains of *B. proteus vulgaris*, III, 355.
- Bachmann, W. E., and Chemerda, J. M., synthesis of 9:10-dialkylanthracenes, II, 10.
- Cole, W., and Wilds, A. L., total synthesis of the sex hormone, equilenin, and its stereoisomerides, II, 225.
- and Edgerton, R. O., phenanthrene derivatives. X. Acetylation of 4-methylphenanthrene, II, 348. Synthesis of 1'-methyl-1:2-benzanthracene and 5-methylchrysene, II, 369.
- and Osborn, G., rate of dissociation of penta-arylethanes, II, 122.
- and Struve, W. S., preparation of 1-keto-3-methyl-1:2:3:4-tetrahydronaphthalene and β -3-methyl-1:2:3:4-tetrahydro-1-naphthylethyl alcohol, II, 310. Synthesis of methylchrysenes and related compounds, II, 326.
- and Wilds, A. L., synthesis of *cis*- and *trans*-17-equilenone, II, 349.
- Bachrach, E., and Guillot, N., displacement of the optimum temperature for [multiplication of] yeast and its return to the original value, III, 261.
- Bachrach, W. H. See Fogelson, S. J., Gray, J. S., and Ivy, A. C.
- Back, E., and Bezler, R., Zeeman effect in fields above 50,000 gauss, I, 184.
- Backer, H. J., spherical molecules, I, 149.
- Backer, H. J., and Homan, J. D. H., *tert*-butyl esters of aliphatic dibasic acids, II, 5.
- and Oosten, R. P. van, unsaturated arsinocarboxylic acids, II, 72.
- See also Bertrand, G.
- Backert, P., changes in serum-sulphur following administration of preparations containing thiophen-sulphur, III, 151.
- Bacon, H. E., and Scheffler, W. A. H., melanosis proctocoli, III, 908.
- Bacon, J. S. D., and Bell, D. J., 3:4-dimethylgalactose, II, 35.
- Bell, D. J., and Lorber, J., use of the benzyl radical in synthesis of methylated sugars. II. 4:6-Dimethylgalactose, II, 364.
- Bacon, R. H., radioactivity of ^{56}Mn , I, 141.
- Grisewood, E. N., and Merwe, C. W. van der, radioactivity of ^{56}Mn , I, 52.
- β -Ray spectrum of ^{128}I , I, 382.
- Bacq, Z. M., effect of ions and veratrine substances [on muscle], III, 107.
- Adrenoxine. V. Inhibitors of adrenoxine formation, III, 729.
- and Goffart, M., humoral transmission and veratrine contraction [of muscle], III, 296.
- and Heirman, P., adrenoxine. II. Formation *in vitro* by impure preparations of vegetable phenolases. IV. Adrenoxine-producing factor in vertebrate tissues. VI. General discussion, III, 729.
- See also Fredericq, H., and Goffart, M.
- Bacsich, P., and Wyburn, G. M., oestrous cycle of guinea-pig, III, 580.
- Baddar, F. G., benzantrones, II, 310.
- Baddelsy, G., mesomerism and orientation, I, 11.
- Bade, H., action of X-rays on musculature, III, 446. Excitability of vasodilators after X-rays, III, 477. Radiosensitivity of rats' skin in relation to central and peripheral nervous system, III, 529.
- Badertscher, J. A., *in toto* staining of tarsal and sebaceous glands, III, 181.
- Badger, E. See Tashiro, S.
- Badger, G. M., and Cook, J. W., synthesis of growth-inhibitory polycyclic compounds. II, II, 220.
- Cook, J. W., and Goulden, F., polycyclic aromatic hydrocarbons. XXI, II, 71.
- Badger, L. F., Masunaga, E., and Wolf, D., vitamin-B₁ deficiency and rat leprosy, III, 750.
- Badger, R. M., relation between energy of a hydrogen bond and frequencies of the O-H bands, I, 198.
- See also Zumwalt, L. R.
- Badir, G., congenital fibrous semi-transparent membrane over part of disc, III, 639.
- Bäcklund, B. See Ramberg, L.
- Bäckström, H. L. J., ultra-violet absorption of cobalt salts and some light filters for the ultra-violet region, I, 400.
- Baehr, G., Leifer, W., Chargin, L., Hyman, H. T., Mahoney, J. F., Webster, B., Thomas, E., Sobotka, H., Mann, W., Feldbau, E., and Rice, J. L., massive arsenotherapy in early syphilis by continuous intravenous drip method, III, 927.
- Bähre, W., dielectric strength of liquid and solid benzene, I, 405.
- Baer, A. J. See Melish, C. H.
- Baer, E., oxidative cleavage of α -keto-acids and -alcohols by means of lead tetraacetate, II, 297.
- Baer, E., and Fischer, H. O. L., synthesis of $d(+)$ - α -glycerophosphoric acid and action of phosphatases on synthetic $d(+)$, $l(-)$, and *dl*- α -glycerophosphoric acids, II, 322.
- Grosheintz, J. M., and Fischer, H. O. L., oxidation of α -glycols or α - β -polyalcohols by lead tetraacetate in aqueous solution, II, 3.
- Bär, F., chemotherapy [with sulphonamides] of lymphogranuloma inguinale and other virus diseases, III, 861.
- See also Schlossberger, H.
- Baer, Flora, mitoses in the anterior and intermediate lobes of the hypophysis, III, 625.
- Baer, J., formation of acetoacetic and hydroxybutyric acid, III, 240.
- Baer, M., action of vitamins in otosclerosis, III, 205. Use of mercurial disinfectants in oto-rhinolaryngological local therapy, III, 206.
- See also Thompson, A. F., *jun.*
- Bär, R., determination of elastic constants of isotropic solids by means of supersonic waves, I, 377.
- Baer, R. L. See Sulzberger, M. B.
- Baer, S., clinical application of determination of circulation time, III, 710.
- and Isard, H. J., value of ether circulation time in diagnosis of right heart failure, III, 793.
- Bagalà, G., effect of luteal hormone, III, 32. Atypical disposition of moderator band in human heart, III, 177. Effect of luteal hormone on ovulation, III, 737.
- Bagby, B. B., *jun.*, urinary prolan excretion during menstrual cycle, III, 579.
- Bagchi, K. N., Ganguly, H. D., and Svidar, G. N., lead content of human hair, III, 813.
- Bagchi, N., width of the K-absorption edge of cobalt, I, 312. Secondary K-absorption spectra of sulphur, I, 424.
- See also Ray, B. B.
- Bagchi, P. N. See Mitter, P. C., and Ray, P.
- Baggenstoss, A. H., and Heck, F. J., follicular lymphoblastoma (giant lymph follicle hyperplasia of lymph nodes and spleen), III, 704.
- Rosenberg, E. F., and Osterberg, A. E., lipid histiocytosis, III, 518.
- Baglioni, T., thyroid, vitamin-B₁, and glutathione, III, 725.
- Bagnall, D. J. T., Smith, A., and Tankard, A. R., determination of paraldehyde, II, 60.
- Bahl, R. K., and Singh, S., periodates of yttrium, erbium, and cerium, I, 79. Action of chlorine on hydroxides of lithium and potassium in presence of iodine. I, I, 363.
- Bai, K. S., Raman spectra of carboxylic acids, I, 283.
- Bailer, J. C., *jun.*, and McReynolds, J. P., stereochemistry of complex inorganic compounds. V. Reaction of carbonates with dichlorodipropylendiamine cobaltic chloride; determining relative configurations, I, 80.
- and Peppard, D. F., stereochemistry of complex inorganic compounds. VI. Stereoisomerides of the dichlorodiamminodipropylendiaminecobaltic ion. VII. Mechanism of the Walden inversion in some reactions leading to the formation of the carbonatodiethylene-diaminecobaltic ion, I, 129, 266.

- Bailey, A. J., removal of adhered rubber stoppers, I, 176. Accelerated sublimation, I, 302.
- Bailey, C. R., and Carson, S. C., infra-red absorption of gaseous cyanogen, I, 7.
- Carson, S. C., and Daly, E. F., infra-red absorption spectrum of methylamine vapour, I, 145.
- Bailey, J. R. See Axe, W. N., Glenn, R. A., and Schenck, L. M.
- Bailey, K., crystalline albumin component of skeletal muscle, III, 795.
- Bailey, K. C., retardation of chemical reactions. X. Choice of retarders in liquid-phase oxidations, I, 224.
- Bailey, O. T., histologic sequences in meningioma; nature of hyperostosis cranii, III, 801.
- and Cutler, E. C., malignant adenomas of chromophobe cells of pituitary body, III, 577.
- Bailey, P., and Sweet, W. H., effects on respiration, blood pressure, and gastric motility of stimulation of orbital surface of frontal lobe, III, 720.
- Bailey, P. L. See Brody, R.
- Bailey, R. L., jun. See Stewart, H. J.
- Bailey, S. D. See Rowley, H. H.
- Bailey, W. A., jun. See Paden, J. H.
- Baillie, J. C., organometallic radicals, II, 263.
- See also Gilman, H.
- Baillart, A., retinal circulation, III, 115.
- Baillart, P., trophic abnormalities in both cornea, III, 203. Retinal circulation, III, 490.
- Bailly, J. See Remlinger, P.
- Baillly, M. D. See Jungeblut, C. W.
- Bain, G. W., spontaneous rock expansion, I, 398.
- Bain, H. G., metallised glass oxygen electrodes, I, 441.
- Bain, J. P., and Pollard, C. B., derivatives of piperazine. XVIII. Synthesis of substituted piperazines and hydrolysis of amines, II, 25.
- Bainbridge, K. T., isotopic weight of helium by direct comparison with oxygen, I, 337.
- Baine, O. See Gilman, H.
- Bair, H. L., fundamental physiologic principles in study of the visual field, III, 803.
- See also Steffens, L. F.
- Baird, R. D. See Rivers, T. M., and Smadel, J. E.
- Baisinger, C. F. See Foord, A. G.
- Baisset, A., Bugnard, L., Charlet, L., and Soula, C., storage of glucose in tissues after injection, III, 57.
- Bugnard, L., Darnaud, C., and Soula, C., tissue-glucose after injection of insulin, III, 57.
- Bajor, (Frl.) O. See Erdy-Grúz, T.
- Bak, B. See Langseth, A.
- Bakalos, D. See Thaddeus, S.
- Bakardjiew, W. N., and Sprenger, O., manometric determination of muscle tone, III, 296.
- Baker, A., and Usher, F. L., nuclear gold sols. II. Mechanism of formation. III. Lower limit of particle size, I, 160, 210.
- Baker, A. B., cerebral damage in hypoglycemia, III, 23.
- and Craft, C. B., bilateral localised lesions in the hypothalamus with complete destruction of neuro-hypophysis in pituitary dwarf with severe permanent diabetes insipidus, III, 732.
- Baker, A. Z., and Wright, M. D., biological assay of vitamin-D₂. I. Assay methods at present in use, with particular reference to Olsson's radiographic technique, III, 916.
- Baker, B. R. See Adams, R.
- Baker, C. J. W. See Bates, L. F.
- Baker, G. S. See Barker, N. W.
- Baker, H., congenital atresia of the bile ducts, III, 178.
- See also Jankelson, I. R.
- Baker, J. G., Aller, L. H., and Menzel, D. H., physical processes in the gaseous nebulae. VII. Transfer of radiation in the Lyman continuum, I, 55.
- See also Aller, L. H.
- Baker, J. W., synthesis in the indole series. I. Synthesis of indolyl-3-glyoxylic acid and of *o*-3-indolylglycine, II, 233.
- Davies, W. C., and Hemming, (Miss), M. L., mechanism of aromatic side-chain reactions, with special reference to polar effects of substituents. X. Depolarisation potentials of *p*-substituted benzaldehydes in acid, neutral, and alkaline media at the dropping mercury cathode, I, 295.
- and Happold, F. C., *coli*-tryptophan-indole reaction. III. Essential structural conditions for the enzymic degradation of tryptophan to indole, II, 260.
- Baker, L. E., causes of cessation of growth of fibroblasts cultivated in embryo juice, III, 180.
- and Carrel, A., artificial maintenance media. II. Cultivation of organs in artificial media, III, 281.
- See also Foot, N. C.
- Baker, M. E. See Stuart, C. A.
- Baker, N. B., and Gilbert, E. C., surface tension in the system hydrazine-water at 25°, I, 436.
- Baker, N. H. See Ide, A. G.
- Baker, R. C. See Edwards, L. F.
- Baker, R. F., and Tate, J. T., ionisation and dissociation by electron impact in CCl₄F₂ and in CCl₄ vapour, I, 347.
- Ionisation and dissociation of normal and isobutane by electron impact, I, 336.
- Baker, R. H., Barkenbus, C., and Roswell, C. A., spinning-band fractionating column for use with small quantities of liquids, I, 395.
- Baker, R. L. See Osgood, E. E.
- Baker, T. W., histaminase in cold allergy, III, 605.
- Baker, W., and Besly, D. M., structure of dimeric forms of *o*-isopropenylphenols, II, 42. Condensation products of phenols and ketones. V. Structure of the dimeric forms of *o*-isopropenylphenols, II, 353.
- Brown, N. C., and Scott, J. A., synthesis of 5-hydroxy-8-methoxyflavone (primetin monomethyl ether), II, 50.
- and Enderby, J., structure of metanthole, II, 342.
- and Munk, (Miss) I., derivatives of 1:2:3:4-tetrahydroxybenzene. VI. Oxidation of quinol with sodium chlorate, II, 342.
- and Simmonds, W. H. C., derivatives of 5:6:4'- and 5:8:4'-trihydroxyflavones, and a note on the structure of ginkgetin, II, 379.
- Baker, W. O. See Caley, E. R.
- Baker, Z., and Miller, B. F., metabolism of creatine and creatinine. III. Formation of creatine by isolated rat tissues, III, 237.
- See also Miller, B. F.
- Bakhsh, I., Kochhar, B. D., and Malik, A. Q., evaluation of intradermal dye test for vitamin-C in health and disease, III, 820.
- Bakken, R. See Haraldsen, H.
- Bakker, A., pathogenesis of galactose cataract, III, 115. Carbonic anhydrase in normal and cataractous lenses, III, 115.
- Bakwin, H., Bodansky, O., and Schiörr, R., refractory rickets, III, 674.
- Balabucha-Popzova, V. S. See Gavrilov, N. I.
- Balamuth, L., Born's thermodynamic theory of melting, I, 105.
- Bălănescu, G., and Motzoc, M. D., determination of aluminium with 8-hydroxyquinoline in presence of iron and of phosphoric acid, I, 81.
- Balarev, D., sphere of transference of the action of forces in a real crystal system, I, 150.
- and Kolarov, N., disperse structure of solid systems and its thermodynamic basis, I, 118.
- Balboni, G., wheat-germ oil, III, 367.
- Baldassarre, E. C., pharmacodynamic action of felinein on heart of *Bufo arenarum*, III, 601.
- Balde, J. H., influence of goat liver and liver extract on goat-milk anaemia of rats, III, 879.
- Baldes, E. J. See Grindlay, J. H., and Huddleston, O. L.
- Baldeschwieler, E. L. See Fry, E. M., jun.
- Baldwin, E., and Bell, D. J., glycogen. VII. Glycogen of *Helix pomatia*, III, 315.
- Baldwin, F. M., and Goldin, H. S., effects of testosterone propionate on the female viviparous teleost *Xiphophorus helleri*, III, 645.
- Goldin, H. S., and Mettessell, M., effects of testosterone propionate on female roller canaries under complete song isolation, III, 848.
- Bale, W. F. See Hahn, P. F.
- Balen, G. F. van, anorexia nervosa and pituitary cachexia [Simmonds' disease], III, 28.
- Balfe, M. P., niutarotation of gelatin, I, 211.
- and Kenyon, J., solvolytic reactions of organic halides, I, 213. Decomposition of chlorosulphinic esters, II, 216.
- Balian, A. See Nasini, A. G.
- Bálint, J. See Sládek, J.
- Baljekar, P. N. See Shanker, J.
- Ball, C. D., jun. See King, L. C.
- Ball, E., heteroauxin and growth of *Escherichia coli*, III, 935.
- Ball, E. G., anticarbutic properties of 2-keto-4-gulononic acid, III, 674.
- and Meyerhof, B., occurrence of iron-porphyrin compounds and succinic dehydrogenase in marine organisms possessing the copper blood pigment haemocyanin, III, 746.
- and Ramsdell, P. A., catalytic action of milk flavoprotein in oxidation of reduced diphosphopyridine nucleotide (cozymase), III, 165.
- Ball, G. H., *pH* of digestive tract in living albino rat as determined by capillary glass electrode, III, 416. Stable capillary glass electrode for measuring *pH* of living tissue, III, 778.

- Ball, T. Z. See Degering, E. F.
- Ballard, J. W., Oshry, H. I., and Schrenk, H. H., quantitative analysis by X-ray diffraction. I. Determination of quartz, I, 393.
- Ballard, K. H. See Briggs, T. R.
- Ballard, S. S., constitution of the solfataric gases at Kilauea volcano, Hawaii, I, 396.
- Ballaus, O., and Wagner, J., Raman effect. CIX. Pentaerythritol and related molecules, I, 243.
- Ballentine, R., changes in respiratory activity accompanying fertilisation of marine eggs, III, 624. Total nitrogen content of *Arbacia* egg, III, 648. Distribution of reducing systems in egg of *Arbacia punctulata*, III, 850.
- and Parpart, A. K., action of lipase on red cell surface, III, 838.
- See also Taylor, A. R.
- Balli, A., effect of fasting on weight of silk-gland of *Bombyx mori*, III, 139.
- Balli, R., tissue reactions to X-rays and their wavelength, III, 446. Sphincters of colon, III, 551.
- Balling, J. See Nadler, J. E.
- Ballion, M. See Dubois, A.
- Ballman, E. A. See Conrad, F. H.
- Ballmer, R. S. See Curtis, A. C.
- Ballou, G. A., and Luck, J. M., buffer influence on taka-diastase, III, 866.
- Balls, A. K., Jansen, E. F., and Axelrod, B., virus of infectious myxomatosis, III, 543.
- Baló, J. von, experimental arteriosclerosis produced by chronic ammonia-poisoning, III, 385.
- Balogh, E. von, venous air embolism, III, 794.
- Baltaceanu, G., Banu, N., Stanesou, M., and Prisloeanu, A., spontaneous filling of bile passages after barium meal, III, 136.
- Balteanu, L. See Slatineanu, A.
- Baltzer, O. J., simple X-ray shutter, I, 375.
- Baltzy, R., and Buck, J. S., amines related to 2:5-dimethoxyphenylethylamine. I. and II., II, 80, 83.
- Balzar, M., and Michelangioli, G., effect of vitamin-B₂ on blood regeneration in experimental anemia, III, 51.
- Balzolet, L., filterability of infectious anemia virus of Equidae; determination of the size of the virus, III, 171.
- Bamann, E., activation of phosphatases by manganese ions, III, 767.
- Bamford, C. H. See Bamford, D. A.
- Bamford, D. A., and Bamford, C. H., spark ignition of mixtures of *as*-dimethylhydrazine and nitric oxide, I, 442.
- Bamman, F. See Jensen, Hans.
- Banchetti, A., naphthylacrylic acids and their derivatives. II. Ring-closure, II, 133. β -Diketones, II, 179.
- Bancroft, D. See Birch, F.
- Band, W., dissociation treatment of condensing systems. II., I, 18. Nature of liquid state, I, 60. Statistical mechanics of condensation phenomena in mobile monolayers, I, 159. Adsorption isotherms for mobile monolayers, I, 209. Flint's five-dimensional theory of the electron, I, 309.
- See also Ch'eng, H. L. C., Ma, C. Y., Mo, W. W., and Tseng, T. P.
- Bandier, E., determination of nicotinic acid in urine, III, 41.
- Bandler, P., action of vitamin-B₁ in migraine, III, 572.
- Bandmann, C. See Schlubach, H. H.
- Bandow, F., absorption spectra of organic substances in phosphoric and sulphuric acids at various concentrations, I, 242.
- Bandy, M. C., theory of mineral sequence in hypogene ore deposits. I. and II., I, 379.
- Banerjee, B. N. See Doctor, N. S., and Ramasarma, G. B.
- Banerjee, K. See Pasnicha, C. L.
- Banerjee, S., Sen, P. B., and Guha, B. C., urinary excretion of combined ascorbic acid in pulmonary tuberculosis, III, 674.
- Banerji, G. G., effect of high-fat diet on excretion of bisulphite-binding substances in urine of rats deficient in vitamin-B₁, III, 914.
- Banerji, H. K. See Kar, B. K.
- Banerji, S. N., and Ghosh, S., changes in viscosity of agar sol with concentration, I, 389. Changes in viscosity of agar sol with temperature, I, 389.
- Bañá, R. F. See Marenzi, A. D.
- Banga, I., Ochoa, S., and Peters, R. A., pyruvate oxidation system in brain, III, 58. Pyruvate oxidation in brain. VII. Dialysable components of the pyruvate oxidation system, III, 147.
- Bangxang, E. na, and Eliot, C. P., preserving solutions for recovery of dysentery bacilli from faecal specimens, III, 453.
- Bank, E. W., and Davenport, H. A., staining paraffin sections with protargol. V. Chloral hydrate mixtures, with and without formamide, for fixing peripheral nerves, III, 281.
- Banks, B. M., and Sears, J. B., hepatic glycogen in obstructive jaundice. I. Comparative effect of oral and intravenous dextrose administration, III, 135.
- Banks, C. K., and Hamilton, C. S., organo-selenium compounds. II. Derivatives of phenylseleninic acid and phenylseleninamide, II, 317.
- Banks, H. S., chemotherapy of meningococcal meningitis, III, 243.
- Banks, T. E. See Krishnan, P. S.
- Banks, W. H. See Ockrent, C.
- Banner, I. See Gilman, H.
- Bannister, F. A., bravoito from Mill Close mine, Derbyshire, I, 422.
- See also Hallimond, A. F.
- Baños, A., jun., fundamental principles underlying the theory of cosmic radiation, I, 5. Asymptotic orbits in the theory of primary cosmic radiation, I, 308.
- Uribe, H., and Lifshitz, J., stable periodic orbits in the theory of primary cosmic radiation, I, 188.
- Banse, H. J., intermediary fat metabolism [in diabetes], III, 860.
- Bansi, H. W., physiology and pathology of thyroid gland, III, 496.
- Banu, N. See Baltaceanu, G.
- Banwell, C. J., and Farr, C. C., velocity of propagation of light in *vacuo* in a transverse magnetic field, I, 242.
- Bapayya, K., continuous wings occurring in Raman effect, I, 56.
- Baptist, M. See Hamblen, E. C.
- Baptist, A. G., and Robson, W., salting out of amino-acids from protein hydrolysates; method for isolation of *l*-phenylalanine, III, 421.
- Barac, G., stabilisation and determination of bilirubin in duodenal fluid, III, 221. Fate of indole in dogs, III, 327. Role of liver in conversion of indole into indoxyl in dog, III, 665.
- See also Lambrechts, A.
- Barach, A. L. See Richards, D. W., jun.
- Baranov, I. V., hydrochemical characteristics of the waters of Neva Bay, I, 44.
- Baranov, V. I., assimilation of radioactive elements by plants, III, 361.
- Barany, E. See Runnström, J.
- Barat, T. P. See Singh, B. K.
- Barber, C. See Damboviceanu, A.
- Barber, C. R., and Schofield, F. H., freezing point of rhodium, I, 64.
- Barber, H. H., apparatus for qualitative semimicro-analysis, I, 177.
- and Gallimore, E. J., metabolism of oxalic acid in the animal body, III, 328.
- See also Maynard, J. L.
- Barber, H. N., and Price, J. R., nature of the Feulgen reaction with nucleic acid, II, 386.
- Barber, H. W., sulphonamides in lupus erythematosus, III, 521.
- Barbey, E., unilateral predominance of provoked nystagmus, III, 205.
- Barbier, D., and Chalouge, D., continuous spectrum of stars with extended atmospheres, I, 137.
- Barbier, H., ring-enlargement in the hydroaromatic series. I. Experiments with 3:3:5-trimethylcyclohexylmethylamine (dihydroisophorylmethylamine). II. Experiments with 2:2:6-trimethylcyclohexylmethylamine (dihydrocyclogeranylmethylamine), II, 217. Variations in reticulocyte count, III, 468.
- Barbieri, D., Gordon's biological reaction, III, 545.
- Barbieri, G. A., decomposition of Prussian-blue by means of 2:2'-dipyridyl, I, 230.
- Barbour, G. M. See Carpenter, C. M.
- Barbour, H. G., and Hammett, F. S., heavy water and longevity, III, 314.
- Barceló, J., metals in cork, III, 694.
- Barclay, A. E., intestinal movements in ileocaecal region, III, 501.
- Barcroft, J., Barron, D. H., and Franklin, K. J., radiographic demonstration of circulation through heart in adult and foetus, and identification of ductus arteriosus, III, 885.
- See also Franklin, K. J.
- Barclay, I. M., and Butler, J. A. V., entropy of solution, I, 74. Double layer capacity at mercury electrodes, I, 119.
- Barclay, R. S., and Kermack, W. O., changes of average maternal age, III, 125.
- Barcroft, H., and Millen, J. L. E., blood flow through muscle during sustained contraction, III, 101.
- Barcroft, J., Barron, D. H., Cowie, A. T., and Forsham, P. H., oxygen supply of foetal sheep brain and effect of asphyxia on foetal respiratory movement, III, 295.
- Kennedy, J. A., and Mason, M. F., oxygen in blood of umbilical vessels of sheep, III, 295.
- See also Barclay, A. E.

- Bardeen, J., concentration of isotopes by thermal diffusion: rate of approach to equilibrium, I, 176, 395.
- Bardhan, J. C., derivatives of 2-phenylcyclohexanone, II, 253. Sterol-œstrone group. II. Derivatives of 2-phenylcyclohexanone, II, 310.
- Barelare, B., jun. See Richter, C. P.
- Barenberg, L. H., Greene, D., and Grand, M. J. H., prophylactic use of parental serum against contagion in a pediatric ward, III, 79.
- Greenstein, N. M., and Leighton, B., effect of human serum on Schick reaction and blood antitoxin titre, III, 869.
- Barendregt, F., and Sizoo, G. J., cloud chamber with electrical automatic control, I, 41.
- See also Sizoo, G. J.
- Barengi, G., reticulocyte formation due to anterior pituitary extracts, III, 401.
- Bargellini, G., flavones derived from hydroxyphloroglucinol, II, 186.
- and Marini-Bettolo, G. B., flavones, flavanones, and flavonols derived from hydroxyquinol, II, 231.
- Bargen, J. A. See Schlicke, C. P.
- Bariatti, R., capillary changes and operative trauma, III, 194.
- Bariety, M. See Troisier, J.
- Barliko, N. A. See Zagvozdin, K. I.
- Barinova, R. A. See Demidenko, T. T.
- Barkan, G., oxidation of sulphanilic and arsanilic compounds by nascent hydrogen peroxide, II, 340. Formation of peroxide and a reversible oxidation-reduction in solutions of sulphanilamide, III, 60.
- and Schales, O., pseudomethæmoglobin and its reaction with carbon monoxide after reduction, III, 479.
- and Walker, B. S., red blood cell as source of plasma-iron and -bilirubin, III, 90. Determination of serum- and pseudohæmoglobin-iron with o-phenanthroline, III, 792. Differentiation of red blood cells by their pseudohæmoglobin content, III, 877.
- Barkas, W. H., ^3He as an agent in nuclear reactions, I, 90.
- Carlson, P. R., Henderson, J. E., and Moore, W. H., concentration of radioactive bromine produced by γ -radiation, I, 427.
- Creutz, E. C., Delsasso, L. A., Sutton, R. B., and White, M. G., β -radiation from ^{27}Si and ^{30}P , I, 400.
- See also Creutz, E. C.
- Barkenbus, C., Roswell, C. A., and Mitts, A. E., equilibrium constants for the systems alkyl formates and alkyl acetates with stearic acid, I, 321.
- See also Baker, R. H.
- Barker, E. F. See Owens, R. G.
- Barker, H. A., Ruben, S., and Beck, J. V., radioactive carbon as indicator of carbon dioxide reduction. IV. Synthesis of acetic acid from carbon dioxide by *Clostridium aciduri*, III, 868.
- Ruben, S., and Kamen, M. D., reduction of radioactive carbon dioxide by methane-producing bacteria, III, 934.
- See also Hassid, W. Z.
- Barker, J. See Huelin, F. E.
- Barker, J. R., blood-plasma changes and variations in female bovine toxæmias, III, 11.
- Barker, M. H., renal function, III, 502.
- Barker, N. W., plasma-lipins in arteriosclerosis obliterans, III, 381. Use of oscillating beds in treatment of peripheral occlusive arterial disease, III, 793.
- and Baker, G. S., acrocyanosis [treatment by sympathectomy], III, 885.
- and Walters, W., hypertension and chronic atrophic pyelonephritis, III, 793.
- Barker, R. G. See Stone, C. P.
- Barker, R. L., and Clemo, G. R., action of selenium at high temperatures on gem-methylethyl groups, II, 339.
- Barker, S. B., increased metabolism and ketosis of depancreatised dogs, III, 328.
- See also Chambers, W. H., and Shorr, E.
- Barker, V. L., and Brines, O. A., hyperfunctioning adenoma of ectopic parathyroid gland, III, 726.
- Barker, W. H., and Wood, W. B., iodism [in hyperthyroid cases], III, 578.
- Barkoff, S. See Katzenelbogen, S.
- Barksdale, I. S., culture tube for more rapid diagnosis, III, 79.
- Barksdale, J. D., silicified wood in dolomite, I, 181.
- Barlow, G. B., scleroderma associated with adrenal neoplasm, III, 30.
- Barlow, O. W., and Homburger, E., specific chemotherapy of experimental staphylococcus injections with thiazole derivatives of sulphanilamide, III, 437. Thiazole derivatives of sulphanilamide and experimental β -hæmolytic streptococcal and pneumococcal infections in mice, III, 676.
- Barman, J. M., determination of activity of hæmo-isoagglutinin by means of erythro-sedimentation, III, 284. Cardiazol does not produce adrenaline secretion, III, 806. Ethylene and cyclopropane do not produce adrenaline secretion, III, 806.
- Barmina, O. N., effect of concussion on nitrogenous constituents of brain tissue, III, 572.
- Barnabishvili, D. N. See Eristavi, D. I.
- Barnard, A. See Friedman, H. B.
- Barnard, J. W., hypoglossal complex in vertebrates, III, 716.
- Barnard, R. D., preparation of hæmatoporphyrin, III, 559. Nitrite ferri-hæmochromogen as reagent for reducing sugars, III, 620.
- and Ross, P. W., effect of alkalosis on blood picture in chronic splenomyelogenous leukaemia, III, 377.
- Barnell, H. R., tropical fruits. VIII. Carbohydrate metabolism of the banana fruit during development, III, 362.
- See also Wardlaw, C. W.
- Barnes, A. H., and Zener, C., internal friction at high temperatures, I, 353.
- Barnes, A. R. See Burchell, H. B., and Noth, P. H.
- Barnes, B. See Cornbleet, T.
- Barnes, B. T., four-filter photo-electric colorimeter, I, 82.
- Barnes, C. L. See Goyan, F. M.
- Barnes, D. J., and Munks, B., serum-phosphatase, -calcium, and -phosphorus values in infancy, III, 840.
- Barnes, E. C., possibilities of control of lead exposure by examining less than 24-hour urine samples, III, 42.
- Barnes, H. D., spinal fluid chlorides in meningitis, III, 718.
- Barnes, H. M., Kundiger, D., and McElvain, S. M., keten acetals. V. Reaction of keten diethyl acetal with compounds containing an active hydrogen [atom], II, 267.
- See also Johnson, P. R.
- Barnes, L. L. See Bogart, R., and McCay, C. M.
- Barnes, R. A. See Arnold, R. T.
- Barnes, R. H., Miller, E. S., and Burr, G. O., *in-vitro* incorporation of fatty acids in phospholipins of intestinal mucosa, III, 134.
- and Wick, A. N., determination of blood-acetone bodies, III, 96.
- See also Clark, W. G., MacKay, E. M., and Miller, E. S.
- Barnes, R. P., Pierce, C. I., and Cochrane, C. C., properties of benzoylmesitylmethane, II, 280.
- and Tulave, V. J., acetylation of α -bromo-ketones and their derivatives, II, 223.
- Barnes, S. T. See Mueller, A. J.
- Barnes, S. W., and Valley, G., long-period activity induced in copper, I, 384.
- See also DuBridge, L. A.
- Barnes, T. C., electrical potential of frog skin, III, 825.
- and Coe, R. J., electric potential of frog skin, III, 607.
- Barnes, W. A., and Sisman, I. E., myeloid leukaemia and non-malignant extramedullary myelopoiesis in mice, III, 92.
- See also Furth, O. B.
- Barnes, W. H. See Adams, A. B.
- Barnett, A., use of radioactive forms of the common elements in physiology, III, 151. Correlations between epidermal impedance and clinical course in psychoses, III, 394. Electrical method for studying water metabolism and translocation in body segments, III, 763.
- Barnett, C. E. See Gamble, D. L.
- Barnett, C. W. See Kluchar, G. V., and Meininger, W. M.
- Barnett, H. L., treatment of pneumonia in infants and children, III, 520. Glomerular filtration rate in infants and children, III, 910.
- Barnett, (Miss) J., Heilbron, I. M., Jones, E. R. H., and Verrill, K. J., sterol group. XLI. New epimerisation process, II, 372.
- Barnick, M. A. W., structure of natural wollastonite, I, 45.
- Barnóthy, J., penetrating [cosmic] radiation under more than 300 metres water-equivalent, I, 308.
- and Forró, M., cosmic-ray particles at great depth, I, 188.
- Barnum, C. P. See MacKay, E. M.
- Barwell, J. B. See Adcock, J. D.
- Baron, A. See Mauriac, P.
- Baron, M. A., localisation of vessels in the serosa and its barrier function, III, 625.
- Baroni, A., polymorphism and isomorphism of the sulphides and selenides of nickel, cobalt, cadmium, and mercury, I, 150. Constitution of sulphonamides and -anilides, II, 214.
- Barpujari, G. N. See Chatterjee, N. N.
- Barr, C. G., analysis of carbohydrates in roots of *Lepidium* and *Convolvulus*, III, 461. Organic reserves in bindweed roots, III, 830.
- Reuszer, H. W., and Thorp, F., jun., chemical composition of *Suckleya suckleyana*, III, 273.
- Barr, E. A., jun. See Kilpatrick, M.

- Barr, E. S., design and calibration of an infra-red spectrometer with a fluorite prism, I, 374.
and Chrisman, C. H., absorption spectra of sugars in the near infra-red, I, 95.
- Barr, M. L., morphology of synapse in cat's spinal cord, III, 21.
- Barrer, R. M., diffusion in solids, I, 250.
Permeability of organic polymerides, I, 292. Diffusion in palladium, I, 355.
- Barrera, S. E. See Ferraro, A., Pacella, B. L., and Strauss, H.
- Barrett, C. S., origin of deformation textures, I, 350.
and Levenson, L. H., structure of aluminium after compression, I, 61.
See also Smith, D. P.
- Barrett, H. M., Best, C. H., Maclean, D. L., and Ridout, J. H., choline and fatty liver of carbon tetrachloride poisoning, III, 135.
- Cunningham, J. G., and Johnston, J. H., fate in the organism of chlorinated hydrocarbons, III, 242.
- Barrett, J. F., new blood test and its application to micro-determination of hæmoglobin, III, 377.
- Barrett, P. A., Bradbrook, E. F., Dent, C. E., and Linstead, R. P., phthalocyanines and related compounds. XVI. Halogenation of phthalocyanines, II, 57.
- Linstead, R. P., Leavitt, J. J., and Rowe, G. A., phthalocyanines and related compounds. XVIII. Intermediates for the preparation of tetrabenzoporphins: Thorpe reaction with phthalonitrile, II, 358.
- Linstead, R. P., Rundall, F. G., and Tuey, G. A. P., phthalocyanines and related compounds. XIX. Tetrabenzoporphin, tetrabenzmonazaporphin, and their metallic derivatives, II, 358.
- Linstead, R. P., and Tuey, G. A. P., phthalocyanines and related compounds. XV. Tetrabenztriazaporphin: its preparation from phthalonitrile and a proof of its structure, II, 57.
- Barrien, B. S., and Wood, J. G., sulphur metabolism of plants. I. Effects of different external concentrations of sulphate, ammonia, and cystine on the amounts of sulphur-containing compounds in leaves. II. Effect of nitrogen supply on amounts of protein- and sulphate-sulphur and on ratio of protein-nitrogen to -sulphur in leaves at different stages of life cycle of the plant. III. Changes in amounts of protein- and sulphate-sulphur during starvation, III, 615.
- Barron, D. H. See Barclay, A. E., and Barcroft, J.
- Barron, E. S. G., biological oxidations. XIII. Oxidation-reduction potentials of *Spirographis* hæmin and its haemochromogens, III, 462.
and Jacobs, H. R., oxidations produced by hæmolytic streptococci, III, 936.
See also Lyman, C. M.
- Barrow, R. F., ultra-violet band system of carbon monoselenide, I, 55. Band spectrum of SnTe in emission, I, 281. Correlation of upper electronic states of homologous molecules, I, 285. Variation of bond strength with inter-nuclear distance in a group of homologous diatomic molecules, I, 431.
- Barrow, R. F., and Jevons, W., ultra-violet band systems of GeSe and GeTe, and their relations to those of similar molecules, I, 343.
- Barrows, F. L., cellulose membranes from various plants, III, 618. Cellulose membranes in cotton fibres, III, 830.
- Barry, A. J. See Peterson, F. C.
- Barry, D. T., influence of caffeine on autonomic nervous system, III, 249.
- Chauchard, A., Chauchard, B., and Chauchard, P., effect of autonomic-stimulating drugs on refractory period and chronaxie of fish myocardium, III, 564.
- Barry, J. G. See Johnson, T. H.
- Barschall, H. H. See Kanner, M. H.
- Barthberger, C. L. See Nathanson, J. B.
- Bartelheimer, H., Cushing's syndrome and diabetes mellitus, III, 302.
See also Pannhorst, R.
- Bartell, F. E., and Bristol, K. E., wetting characteristics of solid surfaces covered with adsorbed films, I, 160.
- Bartelmez, G. W., effects of fixation, etc., on uterine epithelial cells, III, 837.
See also Bloom, W.
- Bartels, E. C., and Kimmel, C. B., metastatic carcinoma simulating hyperparathyroidism, III, 726.
- Bartels, H. E. See Schlubach, H. H.
- Barth, H., and Glasser, O., mitogenetic radiation, III, 530.
- Barth, L. G., oxygen consumption of parts of amphibian gastrula, III, 373.
- Barthelet, J., plant nutrition and parasitism, III, 366.
- Barthen, C. L., Berg, F. F., Carter, E. B., Copley, D. M., Fosbinder, R. J., Lewis, T., and Taylor, F. O., spectrophotometric assay of vitamin-A, III, 50.
- Barthmaier, O. F. See Redman, J. L.
- Bartholomew, O. See Fekete, E.
- Bartholomew, R. A., and Colvin, E. D., diagnosis of occurrence of toxæmia of pregnancy by examination of unknown placenta, III, 214.
- Bartholomew, R. J., and Gent, N. L., preparation of colloidal gold for the Lange reaction, III, 619.
- Bartlett, A. V., phagedenic ulcers, III, 265.
- Bartlett, J. H., jun., theory of multiple scattering of electrons, I, 277.
- Bartlett, J. W. See Reece, R. P.
- Bartlett, N. R. See Graham, C. H.
- Bartlett, P. D., and Cohen, S. G., dieyclic structures prohibiting Walden inversion; *dicyclic*[2, 2, 2]octane derivatives with substituents at the bridgehead, II, 278.
and Dauben, H. J., jun., increases in the acid strength of hydrogen chloride in dioxan brought about by phenols and alcohols, I, 359.
and Knox, L. H., dieyclic structures prohibiting the Walden inversion; replacement reactions of 1-substituted 1-*apocamphanes*, II, 17.
and Nebel, R. W., kinetics of the reaction of *p*-methoxybenzhydriyl chloride with methanol in dilute nitrobenzene solution, I, 364.
- Bartlett, R. G. See McClelland, E. W.
- Bartley, S. H., effects of intermittent photic stimulation, III, 25.
and Bishop, G. H., optic nerve response to retinal stimulation in rabbit, III, 723.
See also Heinbecker, P.
- Bartoli, A., Feldman, J., and Reed, C. I., rôle of pituitary in calorigenic action of vitamin-D, III, 576.
- Bartoli, M. A. See Moruzzi, Giovanni.
- Bartolini, B., effect of sulphanilamide derivatives on chemotropism of leucocytes to staphylococci and streptococci, III, 436. Chemotropism of leucocytes to sulphanilamide derivatives, III, 436.
and Bocca, A., effect of benzylsulphanilamide and carboxysulphamidochrysoidin on experimental diphtheria infection, III, 436.
- Barton, C. J., and Yoe, J. H., null-type photo-electric spectrophotometer, I, 272.
See also Yoe, J. H.
- Barton, D. S., electric correlates of menstrual cycle in women, III, 580. Temperature and electric potentials in menstrual cycle, III, 905.
- Barton, F. E., and Hearne, T. M., placental blood for transfusion, III, 92.
- Bartorelli, C., binding of strontium by gelatin, III, 70.
- Bartow, E. See Hoglan, F. A.
- Bartsch, A. F. See Brannon, M. A.
- Bartunek, P. F. See Cork, J. M.
- Bartz, W. F., sulphites of aluminium and iron at 30°, I, 418.
- Barve, P. M., Vora, V. C., and Desai, B. N., mutual coagulation of colloidal solutions. II. Interaction of Prussian-blue and thorium hydroxide or ceric hydroxide sols, I, 162. Mutual coagulation of colloidal solutions; interaction of copper ferrocyanide with ferric hydroxide, I, 255.
- Barzin, J., and Charlier, R., comparative effect of pure and commercial benzene on dog's heart, III, 564.
- Basak, M. N. See Basu, K. P.
- Bashour, J. T. See Zanetti, J. E.
- Bashulin, P. A., and Merson, J. M., absorption of supersonic waves in acetone-water mixtures, I, 64.
- Basile, A., muscle-lipins under normal and pathological conditions, III, 197.
- Basinski, D. H., and Lewis, G. T., indoluria and its relation to sulphur deficiency, III, 313.
- Basler, A., observations [on movements] carried out with picture kymograph (Bildkymographie), III, 341.
- Basler, R. See Bohn, H.
- Basnett, E. M., metamorphism and assimilation in the Wellington district, New South Wales. I. Hybridisation in the Wuuluman Creek intrusion, I, 303.
- Basova, E. P. See Klebanov, G. S.
- Bass, B. C. See Buehler, C. A.
- Bass, C. E., Vaucluse gold mine, Orange Co., Virginia, I, 304.
- Bass, M. H., and Blumenthal, S., fatal lead poisoning in a nursing infant due to prolonged use of lead nipple shields, III, 253.
- Basse, W., and Gohring, H., treatment of asthma with "quotientin," III, 683.
- Bassen, F. A. See Vogel, P.
- Basset, J., realisation of very high pressures of from 50,000 to 100,000 kg. per sq. cm., I, 377.
- Bassett, H. See Jorissen, W. P.
- Bassett, L. See Selye, H.
- Bassler, A., three cases of masked hypothyroidism having abdominal symptoms, III, 408.

- Bassoe, E. See Cashman, R. J.
- Bast, T. H., and Forester, H. B., origin and distribution of air cells in temporal bone, III, 119.
- Bastenie, P., and Zylberszac, S., effect of irradiated tachysterol (A.T. 10) on parathyroid of female rat, III, 408. Effect of sex hormones on parathyroid of female rat, III, 408.
- Basterfield, S., Rodman, F. B. S., and Tomecko, J. W., isocarbamides and isourcides. V. Addition of dihydric and substituted alcohols to cyanamide, II, 121.
- Bastick, R. E., Heath, H. R., and Ibbs, T. L., molecular fields of carbon dioxide and nitrous oxide, I, 155.
- Basu, D. See Kar, K. C.
- Basu, K. P., and Basak, M. N., protein metabolism in Indians, III, 148.
- Basak, M. N., and Sircar, B. C. R., human metabolism. II. Calcium and phosphorus metabolism in Indians on rice and wheat diets, III, 329.
- and Gupta, J. C. S., vitamin-D content of liver and body oils of Bengal fish, III, 820.
- and Gupta, K., effect of dietary vitamins and calcium on utilisation of proteins, III, 230. Biological value of proteins of species of Bengal fish by the nitrogen balance and growth methods, III, 230.
- and Malakar, M. C., calorific value of Indian foods, III, 230.
- Sircar, B. C. R., and Gupta, J. C. S., vitamin-A content of Bengal fish, III, 818.
- Basu, N. M., and Mitra, M. C., osmotic relations between egg-white and egg-yolk and the effects of injection of potassium cyanide and sodium fluoride thereon, III, 607.
- and Ray, G. K., average urinary output and state of saturation of Bengali boys with respect to vitamin-C, III, 819. Course of excretion of ascorbic acid in urine after its intake in large doses, III, 819.
- Batalin, A. C. See Ass, T. V.
- Batchelder, A. C., and Schmidt, C. L. A., effects of salt mixtures on dissociation of glycine and alanine, I, 116.
- Batchelor, R. C. L., Lees, R., and Thomson, G. M., sulphonamides for gonorrhœa, III, 861.
- Batdorf, S. B., and Beth, E. W., radiative losses by particles of anomalous magnetic moment, I, 385.
- Bate, A. E., velocity of sound in air at temperatures below 0°, I, 236.
- Bate-Smith, E. C. See Herbert, D.
- Bateman, J. B., and Potapenko, G., anomalous dispersion and absorption of electric waves in solutions of amino-acids and dipeptides, I, 351.
- Bateman, J. D., rock alteration in the Uchi gold area, Ontario, I, 398.
- Bateman, L. C., Church, M. G., Hughes, E. D., Ingold, C. K., and Taher, N. A., mechanism of substitution at a saturated carbon atom. XXIII. Kinetic demonstration of the unimolecular solvolysis of alkyl halides. E. General discussion, I, 391.
- Cooper, K. A., and Hughes, E. D., mechanism of substitution at a saturated carbon atom. XI. Hydrolysis of *tert*-butyl bromide in acidic moist acetone, I, 391.
- Bateman, L. C., Cooper, K. A., Hughes, E. D., and Ingold, C. K., mechanism of substitution at a saturated carbon atom. XIII. Mechanisms operative in hydrolysis of methyl, ethyl, isopropyl, and *tert*-butyl bromides in aqueous solutions, I, 391.
- and Hughes, E. D., mechanism of substitution at a saturated carbon atom. XIV. Unimolecular substitutions of *tert*-butyl chloride with water, and with anions, as substituting agents in formic acid solution. XV. Unimolecular and bimolecular substitutions of *n*-butyl bromide with water, and with anions, as substituting agents in formic acid solution. XVI. Hydrolysis of methyl, ethyl, isopropyl, and *tert*-butyl bromides in acidic solutions under conditions believed to be conducive to uniformity of mechanism, I, 391.
- Hughes, E. D., and Ingold, C. K., mechanism of substitution at a saturated carbon atom. XIX. Kinetic demonstration of the unimolecular solvolysis of alkyl halides; kinetics of, and salt effects in, hydrolysis of *tert*-butyl bromide in aqueous acetone. XXII. Kinetic demonstration of the unimolecular solvolysis of alkyl halides: kinetics of, and salt effects in, hydrolysis of *pp'*-dimethylbenzhydryl chloride in aqueous acetone. XXIV. Qualitative survey of nucleophilic substitutions of benzhydryl halides in sulphur dioxide solution. XXV. Unimolecular halogen exchange between an alkyl halide and halide ions in sulphur dioxide solution, and a concluding note, I, 391.
- Bateman, W. H. See Hamilton, W. F.
- Bates, D. R. See Massey, H. S. W.
- Bates, G. R., growth behaviour of plants following seed treatment by organic mercury compounds, III, 460.
- Bates, J. J. G. See Lescher, F. G.
- Bates, L. F., and Baker, C. J. W., magnetic properties of non-homogeneous systems. II. Nickel amalgams. III. Ferromagnetic cobalt and nickel in mercury, I, 351.
- Baker, C. J. W., and Meakin, R., magnetic properties of non-homogeneous systems. I, I, 351.
- and Weston, J. C., energy changes accompanying magnetisation, I, 152. Thermal expansion of invar, I, 289.
- Bates, R. W., and Riddle, O., effect of volume used for injection on micro-assay of prolactin, III, 847.
- Riddle, O., and Laar, E. L., rôle of sex, oestrogenic hormone, fasting, and diuresis in response of crop-sacs of pigeons to prolactin, III, 405.
- Bath, J. See Ellis, J. W.
- Batson, O. V., latex emulsions in human vascular preparations, III, 372.
- Batta, G., Firket, J., and Leclerc, E., lead poisoning in [oxyacetylene] cutting of a metal bridge, III, 824.
- Battaglia, J. See Parrish, P. P.
- Battelli, G., effect of route of administration on toxicity of poisons, III, 444.
- Battenberg, E. See Meerwein, H.
- Batterman, R. C. See Brightman, I. J.
- Battista, W. P. See Williams, C. E.
- Batts, M., multiple myeloma, III, 671.
- Baucke, J., thiochrome method of examining vitamin-B₁ metabolism, III, 233.
- Baudisch, O., simple formation of *o*-nitrosophenol from benzenic and hydroxylamine by atmospheric oxidation; preparation of *o*-nitrosophenol and nitrosocresol from benzene and toluene by oxidation with hydrogen peroxide, II, 41.
- and Brewer, A. K., geochemistry of the Saragota basin; radioactivity of Saragota spring waters and rocks, I, 44.
- and Smith, S. H., simple formation of nitrosophenols from phenols, II, 41.
- Baudouin, J. A., industrial hygiene from public health aspect, III, 256.
- Bauer, E. See Euler, H. von.
- Bauer, E. L., treatment of chorea and rheumatic infection by fever induction, III, 255.
- Bauer, Hellmut, and Reindell, H., cumulative action of digitalis-glucosides, III, 153.
- Bauer, Hugo, and Rosenthal, S. M., antibacterial action of phosphorus compounds, III, 332.
- See also Rosenthal, S. M.
- Bauer, J., Fisher, W. G., and Gutman, G., antithyroid principles, III, 208.
- Bauer, J. H., and Pickels, E. G., apparatus for freezing and drying virus in large quantities under uniform conditions, III, 269.
- See also Pickels, E. G.
- Bauer, S. H., inversion of the partition function to determine density of energy states, I, 61.
- Bauer, S. T. See Ralston, A. W.
- Bauer, W. See Beckman, W. W., Coggeshall, E. C., Hench, P. S., Robertson, W. van B., and Ropes, M. W.
- Bauernfeind, J. C., and Norris, L. C., rôle of the antidermatosis vitamin; new water-soluble growth factor in nutrition of the mature fowl, III, 429.
- Baughan, E. C., electrostatic effects on ionisation constants. I, 25. Resonance in the chloroacetic acids, I, 430.
- Bauguess, L. C. See Smith, A. H.
- Baum, H. See Niederl, J. B., and Schwarz, H.
- Baum, L., local effect of subcutaneous injections of enzyme solutions, III, 447.
- Baum, R., and Cunningham, B., relationships between primary and secondary sex organs of rat, III, 33.
- Baum, W. S., and McCoord, A. B., relationship between biophotometer tests and vitamin-A content of blood in children, III, 592.
- See also Clausen, S. W.
- Bauman, A. W. See Mack, P. B.
- Bauman, L., experience with globin insulin, III, 898.
- Baumann, C. A., Rusch, H. P., Kline, B. E., and Jacobi, H. P., does cholesterol stimulate tumour development? III, 423.
- Semb, J., Holmes, C. E., and Halpin, J. G., determination of vitamin-A in hen's egg, III, 50.
- and Stare, F. J., effect of malonate on tissue [muscle] respiration, III, 480.
- See also Jacobi, H. P., Rusch, H. P., and Stare, F. J.
- Baumann, E. J., and Metzger, N., androgen assays of normal and pathological urines, III, 902.
- and Sprinson, D. B., response of various breeds of rabbits to Hamilton and Schwartz test for parathyroid secretion, III, 846.

- Baumgarten, P., and Bruns, W., reaction of boron fluoride with boron trioxide, borates, carbonates, and nitrates; possible boron oxyfluoride (BOF), I, 126.
- and Dornow, A., 1-(4'-amino-2-methyl-5'-pyrimidylmethyl)-2-methyl-3- β -hydroxyethylpyridinium bromide, heterovitamin-B₁₂, II, 291.
- and Hennig, H., additive products of boron fluoride to sulphates and phosphates, I, 126.
- Baumgartner, J. G., heat-sterilised reducing sugars: effects on thermal resistance of bacteria, III, 935.
- and Knock, G. G., stability of bacteria in relation to pH, III, 540.
- Baumgartner, W., goitre in the Tyrol, III, 122.
- Baur, E., equilibrium of formaldehyde with glycine, I, 213. Luminescence of luminol, I, 297. Photolysis of rhodamine, II, 231. Inhibitors of invertase, III, 72.
- Baur, H., action of arginase and histidinase, III, 12.
- Bausor, S. C., response of tomato plants to β -naphthoxyacetic acid, III, 459. β -Naphthoxyacetic acid, a new growth-substance, III, 459.
- Bavendamm, W., and Reichelt, H., growth of wood-decomposing fungi and water content of the nutrient medium, III, 460.
- Bawden, F. C., and Pirie, N. W., inactivation of plant viruses by urea, III, 870. Effects of alkali and simple organic substances on three plant viruses, III, 870.
- and Sheffield, F. M. L., intracellular inclusions of plant virus diseases, III, 547.
- Bawers, W. F., appendicitis, III, 664.
- Bawn, C. E. H., Hirst, E. L., and Young, G. T., nature of bonds in starch, II, 338.
- Baxley, W. H. See MacNevin, W. M.
- Baxmeier, R. I. See Schindler, R.
- Baxt, H. See Mattice, M. R.
- Baxt, L. M. See Newitt, D. M.
- Baxter, G. P., Guichard, M., Höhnigschmid, O., and Whytlaw-Gray, R., tenth report of the committee on atomic weights of the International Union of Chemistry, I, 185.
- and Harrington, C. D., at. wt. of potassium, I, 337. At. wt. of caesium, I, 337.
- and Kelley, M. W., specific gravity of iodine pentoxide and at. wt. of iodine, I, 337.
- and Lundstedt, O. W., at. wt. of iodine. I. Ratio of silver to silver iodide. II. Ratio of silver iodide to silver chloride, I, 337.
- and Titus, A. C., at. wt. of iodine; ratio of silver iodide to silver chloride, I, 337.
- Baxter, H., Baxter, S. G., and McIntosh, J. F., variations in level of serum-lipase in experimental pancreatitis, III, 37.
- Baxter, J. G., and Robeson, C. D., crystalline vitamin-A palmitate and vitamin-A alcohol, II, 371.
- Baxter, J. H., jun. See Robbins, B. H.
- Baxter, J. S., application of trichrome staining methods to embryological technique, III, 877.
- Baxter, S. G. See Baxter, H.
- Bay, N. See Roelsen, E.
- Bayer, L. M., diet of adolescent girls; nutritional state and dental caries, III, 425.
- Bayer, L. M., and Newell, R. R., assessment of skeletal development of hand and knee between ages of 8 and 14, III, 621.
- Bayer, O., toxicology, clinical symptoms, and pathological anatomy of nickel carbonyl poisoning, III, 443. See also Tietze, E.
- Bayer, R., movements of extrahepatic bile duct system, III, 136.
- Bayerle, H., digestibility of tumours by enzymes, III, 590.
- Bayless, F. See Goldblatt, H.
- Bayley, D. S. See Huntoon, R. D.
- Baylin, G. J., collateral circulation in abdominal aortic obstruction, III, 697.
- Bayliss, L. E., circulation model, III, 189.
- and Brown, A., renal nerves and water diuresis, III, 587.
- Bayliss, M., effect of sulphanilamide, sulphapyridine, and sulphathiazole on staphylococcus toxins, III, 919.
- Bayliss, N. S., and Rees, A. L. G., electronic absorption spectra in solution with special reference to continuous absorption of the halogens, I, 285. See also Aickin, R. G.
- Bayon, H. P., allusions to a "circulation" of the blood in MSS. anterior to "De motu cordis," 1628, III, 13. Ancient pregnancy tests in light of contemporary knowledge, III, 662.
- Bazett, H. C., Sunderman, F. I. J., Doupe, J., and Scott, J. C., climatic effects on volume and composition of blood in man, III, 789. See also Burton, A. C.
- Bazin, S. See Régnier, J.
- Beach, A. See Sure, B.
- Beach, B. A. See Crawford, A. B.
- Beach, E. F., Bernstein, S. S., Hummel, F. C., Williams, R. H., and Macy, I. G., total sulphur, cystine, and methionine content of blood-globins of five mammalian species, III, 95. See also Stern, Adolph.
- Beach, J. Y., and Walter, J., molecular structure of isobutane, I, 246. See also Turkovich, A., and Walter, J.
- Beadle, D. G., depth of focus of microscope objectives, I, 374.
- Beadle, L. C., regulation of haemolymph in saline water mosquito larva *Aedes tritritus*, Edw., III, 95.
- Beadnell, C. M., mass of the universe, I, 280.
- Beale, G. H., Price, J. R., and Scott-Moncrieff, R., genetics of *Verbena*. II. Chemistry of flower colour variation, III, 945.
- Beall, D., isolation of oestrone from adrenal gland, III, 128. Isolation of α -oestradiol and oestrone from horse testes, III, 849.
- Beamish, F. E. See Rogers, W. J.
- Beams, A. J. See Myers, V. C.
- Beams, H. W., and King, R. L., effects of low temperature on survival and mitotic figure of eggs of *Ascaris equorum*, III, 835. and Kirshenblit, H. W., ultracentrifugation of rat spinal ganglion cells with reference to neurofibrillae, III, 785. See also King, R. L.
- Bean, J. W. See Bohr, D. F.
- Bean, W. B., Vilter, R. W., and Spies, T. D., effect of X-rays on blood-codehydrogenases I and II, III, 380. See also Spies, T. D., and Vilter, R. W.
- Bear, R. S., and Schmitt, F. O., electrolytes in axoplasm of giant nerve fibres of squid, III, 109. See also Schmitt, F. O.
- Beard, D. See Beard, J. W., and Sharp, D. G.
- Beard, E. E. See Terry, L. L.
- Beard, G. See Chor, H.
- Beard, H. H., chemistry of aqueous extracts of sheep's adrenal cortex, III, 124. and Espenan, J. K., synthesis of glyco-cyamine and creatine from amino-acids, urea, and cyanamide, III, 533. and Jacob, E. J., effect of injection of creatine and creatinine with sex hormones on creatine-creatinine excretion in (1) normal and (2) castrate animals, III, 734. See also Koven, A. L.
- Beard, J. W., Beard, D., and Finkelstein, H., human vaccination against equine encephalomyelitis virus with formalised chick embryo vaccine, III, 172. See also Bryan, W. R., Sharp, D. G., and Taylor, A. R.
- Beard, R. R. See McNaught, J. B.
- Bearden, J. A., viscosity of air, I, 65. and Beeman, W. W., K-absorption edges and $K\beta_{2,5}$ -emission lines of two zinc-nickel alloys, I, 423. and Friedman, H., X-ray $K\beta_{2,5}$ -emission lines and K-absorption limits of copper-zinc alloys, I, 423. See also Munier, J. H.
- Beardsley, N. F., correlation between cosmic-ray intensity and upper air pressures and temperatures, I, 188.
- Bearg, P. A. See Thompson, H.
- Bearse, A. E. See Norris, J. F.
- Beasley, J. O., hybridisation of American 26-chromosome and Asiatic 13-chromosome species of *Gossypium*, III, 943.
- Beath, O. A., the seleniferous *Astragalus osterhoutii*, Jones, III, 458. Gilbert, C. S., and Eppson, H. F., use of indicator plants in locating seleniferous areas in western United States. I. General. II. Correlation studies by states, III, 458.
- Beati, E., and Mattei, G., catalytic dehydration of amylenic glycols, II, 150. See also Baccaredda, M.
- Beaton, L. E., and Anson, B. J., pyramidalis muscle: occurrence and size in American whites and negroes, III, 1. Holmes, C. A., and Windle, W. F., multinucleate sympathetic ganglion cells in man, III, 374.
- Beatty, H. A. See Galingaert, G.
- Beatty, R. A., De Jong, S., and Zielinski, M. A., effect of dyes on induction and respiration in amphibian gastrula, III, 86.
- Beauchamp, R. S. A., chemistry and hydrography of lakes Tanganyika and Nyasa, I, 396.
- Beaudette, F. R. See Metzger, H. J.
- Beauvallet, M. See Benoit, P. H.
- Beaven, G. H., Hirst, E. L., and Jones, J. K. N., pectic substances. IV. Citrus araban, II, 36.
- Beavers, E. M. See Quayle, O. R.
- Beazell, J. M., Schmidt, C. R., Ivy, A. C., and Monaghan, J. F., modification of Anson and Mirsky's haemoglobin method for determination of pepsin in gastric drainage, III, 35. See also Schmidt, C. R.
- Bebeschin, K. V. See Smorodincev, I. A.

- Beccari, E., determination of uric acid with potassium ferriocyanide, III, 84. Assay of adrenaline by blood pressure method, III, 809. Potentiometric titration of uric acid, III, 832. Electrochemical theory of uricolysis in alkaline media, III, 866.
- See also Chistoni, A.
- Bechdel, S. I. See Knight, C. A., and Ward, R. E.
- Bechtold, M. F., and Newton, R. F., vapour pressures of salt solutions, I, 354.
- Beck, C. A. See Smith, S.
- Beck, C. A. See Radle, W. F.
- Beck, E., neuro-histological investigations in pigeons after diethylal, III, 522.
- Beck, E. C. See Hubbard, R. S.
- Beck, F. F., and Krantz, J. C., jun., glycolysis in tumour tissue. III. Effect of ultrasonic vibrations on growth and glycolysis of Walker sarcoma 319, III, 815.
- See also Morrison, S.
- Beck, H. G., Schulze, W. H., and Suter, G. M., carbon monoxide poisoning, III, 887.
- Beck, J. See Tixier, G.
- Beck, J. V. See Barker, H. A.
- Beck, J. W. See Emeleus, K. G.
- Beck, S., failure of intraperitoneal injection of 3:4-benzpyrene solution to increase the general susceptibility to cancer, III, 588.
- and Peacock, P. R., latent carcinogenic action of 3:4-benzpyrene; results of intermittent applications to skin of mice, III, 853.
- Beck, W. A., and Donnelly, M. W., *Helianthus* test, III, 547. Bending and cell enlargement in the hypocotyl of *Helianthus annuus*, III, 693.
- and Redman, R., seasonal variations in the production of plant pigments, III, 945.
- Beck, W. C. See De Takats, G., and Scupham, G. W.
- Becker, A., selenium photo-elements, I, 196. Changes in position of spinal nerves and their roots during embryonic development, III, 464.
- Becker, (Frl.) E. See Berg, R.
- Becker, Erich. See Butenandt, A.
- Becker, Eugene, composition of Hungarian varieties of plums, III, 694.
- Becker, E. R., effect of thiamin chloride on *Eimeria nieschulzi* infection of rat, III, 322.
- Becker, J. A., and Moore, G. E., thermionic emission, migration, and evaporation of barium on tungsten, I, 139.
- Becker, R., retardation of magnetisation through microscopic eddy currents, I, 103. Internal strains and magnetism, I, 247. Formation of nuclei [in alloys] during precipitation, I, 250.
- Becker, R. F. See Windle, W. F.
- Becker, S. W. See Muir, K. B.
- Becker, T. J. See Stormont, R. T.
- Becker-Freyseng, H., and Clamann, H. G., analysis of oxygen-rich gas mixtures by Haldane's method, I, 419. Oxygen intoxication, III, 478.
- See also Clamann, H. G.
- Beckman, H., and Ota, R. K., economical method of obtaining blood from the canary, III, 556.
- Beckman, J. F. See Vosburgh, W. C.
- Beckman, W. W., Rossmeisl, E. C., Petten-gill, R. B., and Bauer, W., effects of sulphanilamide on acid-base metabolism, III, 756.
- Beckwith, J. R., and Chanutin, A., pressor effect of kidney extracts of intact and partially nephrectomised rats, III, 565.
- Beckwith, R. H., asbestos and chromite deposits of Wyoming, I, 181.
- Becquerel, J., and De Haas, W. J., paramagnetic rotation of the plane of polarisation, I, 386.
- and Handel, J. van den, magnetic rotatory power of hexahydrated nickel fluosilicate in the direction of the optic axis: thermal variation down to liquid helium temperatures, I, 14.
- and Opechowski, W., paramagnetic rotatory power and magnetisation of nickel fluosilicate hexahydrate in the direction of the optic axis; the crystal field, I, 14.
- Bedford, D. E. See Parkinson, J.
- Bedford, T. H. B., monoiodoacetic acid, subarachnoid space, and absorption of water from glucose solutions, III, 572.
- Bedini, S. See Fiaschi, E.
- Beebe, G. W. See Hertzog, A. J.
- Beebe, R. A., and Stevens, N. P., heats of adsorption of gases on iron synthetic ammonia catalysts at low temperatures, I, 408.
- Beech, W. F., and Drew, H. D. K., structure of aluminium lakes of azo-dyes and of alizarin, II, 250. Copper lakes of azo-dyes; further types, II, 250.
- Beecher, H. K., chemical constitution and anaesthetic potency in relation to cortical potentials, III, 801.
- Beeman, J., blood-alcohol determination, III, 561.
- Beeman, W. W. See Bearden, J. A., and Friedman, H.
- Been, J. See Lehrman, L.
- Beer, A. A., anti-malarials of the 8-amino-alkylamino-6-methoxyquinoline series, II, 190.
- Beer, A. G., parabiatic rabbits, III, 139.
- Beerman, H. See Stokes, J. H.
- Beerwald, A., diffusion of metals in aluminium, I, 205.
- Beeson, P. B., and Goebel, W. F., immunological relationship of capsular polysaccharide of type XIV pneumococcus to blood group, III, 453.
- Beetham, W. P., atopic cataracts, III, 844.
- Beevers, C. A., and Hughes, W., crystal structure of Rochelle salt, I, 350.
- See also Jensen, A. T.
- Beger, E. See Thiessen, P. A.
- Begnun, A. E. See Washburn, E. R.
- Behan, M. A. See Freund, J.
- Behnke, A. R., physiological effects of increased and decreased atmospheric pressure; application of findings to clinical medicine, III, 712.
- and Yarbrough, O. D., respiratory resistance, oil-water solubility, and mental effects of argon, compared with helium and nitrogen, III, 479.
- Behr, C. H., leucocytosis after injection of adrenaline, III, 183.
- Behr, G. See Rippel, A.
- Behre, C. H., jun., European coliforms of Mississippi Valley type, I, 239.
- Behrendt, W. See Fredenhagen, K.
- Behrens, B., and Malorny, G., emetic substances in coffee, III, 601.
- Behrens, O. K., Lipmann, F., Cohn, M., and Burke, D., non-specificity of amino-acid configuration in malignant tissue hydrolysates, III, 815.
- See also Lipmann, F.
- Behrmann, V. G., and Fay, M., glass electrode vessel for determination of blood- p_{H} , III, 11.
- Beibl, R., protoplasmic ecology of sea algae, III, 360.
- Beilly, J. S., p_{H} of vaginal secretion as index of ovarian activity in hypo-ovarian states, III, 739.
- Kurland, I., and Jacobi, M., hormone excretion and bioassay of extirpated tumour in teratoma of testis, III, 733.
- and Solomon, S., inhibition of lactation by testosterone propionate, III, 644.
- Beischer, D., oriented coagulation in aerosols. III. Tensile strength of aerosol sediments, I, 113.
- See also Ardenne, M. von.
- Békésy, G. von, acoustics of hearing. II. Mechanical properties of cochlea, III, 26. Mechanical aspects of hearing, III, 118.
- Bekturov, A., effect of temperature on the partition coefficients of saturated monocarboxylic acids between water and benzene, I, 207.
- Belaiev, A. F., combustion of boiling explosives, I, 29.
- Belair, J. F. See Elward, J. F.
- Belcot, C. See Atanasiu, I. A.
- Belding, H. S. See Field, J., jun.
- Belgradek, J., functional metabolism of frog melanophores, III, 314.
- Beliankin, D. S., and Ivanov, B. V., petrography of chromite-dolomite refractories, I, 303.
- and Petrov, V. P., hibschite in Georgia, I, 45. Crystallisation of the Kangas-niemi orbicular granite, I, 136.
- Belinfante, F. J. See Pauli, W.
- Beling, A., calcification of pancreas, III, 742.
- Beljaeva, E. I. See Jermolieva, Z. V.
- Belk, W. P., Henry, N. W., and Rosenstein, F., observations on human blood stored at 4-6°, III, 285.
- Belkevitch, P. I., sorption of hydrogen by metals of the platinum group. I. Sorption isotherms of the systems iridium-, rhodium-, osmium-, and ruthenium-hydrogen. II. Effect of thermal treatment of [iridium- and rhodium-]black on its sorptive power, I, 21.
- Bell, A. See Allen, C. F. H.
- Bell, A. C. See Allen, C. F. H.
- Bell, D. J., and Lorber, J., use of the benzyl radical in syntheses of methylated sugars. I. 4:6-Dimethylglucose, II, 204.
- See also Bacon, J. S. D., and Baldwin, F.
- Bell, E. J. See Cox, H. R.
- Bell, F. O. See Astbury, W. T.
- Bell, G. H., Knox, J. A. C., and Small, A. J., electrocardiograph electrolytes, III, 289.
- Bell, H. E., and Driver, J. E., Fries rearrangement of phenyl laurate and stearate, II, 310.
- Bell, J., salt hydrates and deuterates. II. Correlation of heat of dissociation and structure, I, 164.
- Bell, J. F. See Keeley, J. L.
- Bell, P. H. See Roblin, R. O., jun.
- Bell, R. P., repulsive forces between isotopic molecules, I, 191. Resonance in the chloroacetic acids, I, 386.
- and Danckwerts, P. V., acid catalysis in non-aqueous solvents. VIII. Rearrangement of *N*-chloroacetanilide in chlorobenzene solution at 100°, I, 32.
- and Hirst, J. P. H., acid-base catalysis in the depolymerisation of dimeric glycollaldehyde, I, 32.

- Bell, R. P., and Lidwell, O. M., base-catalysed prototypy of substituted acetones, I, 416. Potential energy curves in proton transfer reactions, I, 416.
- and Sherred, J. A., acid catalysis in non-aqueous solvents. IX. Mutarotation of *n*-nitrocamphor in chlorobenzene solution, I, 416.
- Sturrock, J. G. R., and Whitehead, R. L. St. D., kinetics of the reaction between ethylene glycol and lead tetra-acetate, I, 166.
- and Thomas, J. K., reaction velocities at low temperatures. I. Low-temperature thermostat. II. Bromination of acetone between -40° and 10° , I, 32, 40.
- Bellamy, A. W. See Grobstein, C.
- Bellavita, V., and Cagnoli, (Signa.) N., nitrones. V. Action of potassium cyanide on carbamyl nitrones. VI. Synthesis of benzylidene carbamides, II, 41.
- Belli, F., umbilical artery at different ages, III, 85. Papillary lines in synodactyly, III, 177.
- Bellet, S., Freed, H., and Dyer, W. W., electrocardiogram during insulin shock treatment of schizophrenia and other psychoses, III, 189.
- Bellis, C. J., and Cook, M. M., thermoelectric thermometer for clinical measurement of skin surface temperatures, III, 274.
- and Wangenstein, O. H., venous circulatory changes in abdomen and lower extremities attending intestinal distension, III, 17.
- Bellolio, P. See Lipschütz, A.
- Bellone, A., synovial cavity of elbow studied by radiology, III, 371.
- Bellows, J. See Chinn, H.
- Bellows, R. T., and Van Wagenen, W. P., effect of resection of olfactory, gustatory, and trigeminal nerves on water-drinking in dogs without and with diabetes insipidus, III, 121.
- Bellucci, B., attacking point of rays in the living organism, III, 258.
- Belopolski, A. P., Serebrennikova, M. T., and Bilevitch, A. V., vapour pressure of saturated solutions and solubility in the system $\text{CaO}-\text{P}_2\text{O}_5-\text{H}_2\text{O}$, I, 294.
- Beloselski, V., photochemical decomposition of ammonia adsorbed on crystals of copper sulphate and magnesium oxide, I, 208.
- Belousov, A. M., and Terentiev, A. P., minimum and equilibrium concentrations. I, I, 390.
- Belov, I. V., mean chemical composition of the granitoids of the Zerkavshan-Guissar mountain range (Middle Asia), I, 238.
- Belozerski, A. N., nucleic acids of *Allium cepa*, III, 461.
- Belsor, W. B., Hauck, H. M., and Storvick, C. A., ascorbic acid intake required to maintain tissue saturation in normal adults, III, 52.
- Beltjukova, K. I., bacteriophagy in putrefaction of potatoes, III, 77.
- Belton, J. W., surface tensions of two-phase liquid systems containing benzene, I, 69. Surface tensions of methyl acetate solutions, I, 209.
- Beltrami, G. See Michetti, G.
- Belval, H. See Colin, H.
- Bembry, T. H. See Powell, G.
- Benbow, J. T. See Ingram, W. R.
- Benbrook, C. H. See Crossley, M. L.
- Bench, G. E. See Mayerson, H. S.
- Benda, C. E., growth disorder of skull in mongolism, III, 551.
- and Bixby, E. M., function of thyroid and pituitary in mongolism, III, 724.
- Benda, R., Orinstein, E., and Depitre, (Mlle.), injections of opaque compounds into bone marrow of man, III, 627.
- and Urquia, D. A., character of granules in neutrophil polymorphonuclear leucocytes in tuberculosis in man and guinea-pig, III, 557.
- Bender, M., and Kohler, A., dosage distribution in pendulum irradiation, III, 446.
- Bender, M. B., kinetics of choline-esterase in blood and spinal fluid, III, 96. Parasympathomimetic effects of erythrocytes in cat, III, 702.
- and Fulton, J. F., factors in functional recovery following section of oculomotor nerve in monkeys, III, 716.
- and Kanzer, M. G., dynamics of homonymous hemianopias and preservation of central vision, III, 204.
- and Savitsky, N., paralysis of divergence, III, 637.
- and Siegal, S., release of autonomic humoral substances in hypoglycæmic cats and monkeys, III, 486.
- See also Davids, A. M., and Weinstein, E. A.
- Bendich, A. See Kremer, C. B.
- Benedetti-Pichler, A. A., and Rachele, J. R., limits of identification of simple confirmatory tests, I, 300.
- Benedicks, C., and Sederholm, P., first Benedicks effect in gas-free mercury, as influenced by the mean temperature, I, 137, 288.
- Benedict, E. B., value of peritoneoscopy in gastro-enterology, III, 220.
- Benedict, M., Webb, G. B., and Rubin, L. C., empirical equation for thermodynamic properties of light hydrocarbons and their mixtures. I. Methane, ethane, propane, and *n*-butane, I, 248.
- Beneke, R., developmental mechanics and pathology, III, 279.
- Benelli, R., and Donatelli, L., effect of sexual hormones on vesicular muscle, III, 212.
- Benetato, G., and Ciurdariu, P., effect of age on serum-potassium, III, 287. Effect of age on tissue-potassium, III, 314.
- Bénézech, C. See Cristoly, P.
- Benfield, A. E., terrestrial heat flow in Great Britain, I, 178.
- Benford, F., transmission factors of ultra-violet radiation through water, I, 343.
- Bengry, R. P. See Pearsall, W. H.
- Bengtson, I. A. See Pasternack, J. S.
- Benigni, R., colorimetric analysis of body fluids and biological material, III, 84.
- Benington, F. See Worrall, D. E.
- Benini, M., low-energy neutrons emitted from beryllium bombarded with α -particles, I, 52.
- Benjamin, L. See Matchett, J. R.
- Benjamin, M., field emission microscope, I, 376.
- Benjamins, C. E., Tullio's acoustic reactions in man, III, 119. Paratympanic organ of Vitali (so-called organ of flight in birds) in penguin, III, 120.
- Benkovitsch, I. L., protein metabolism of brain following trauma. I. Chemical topography of the brain. II. Effect of removing the visual and olfactory organs. III. Chemical composition of brain after extirpation of receptor-effector organs. IV. Content of nitrogenous compounds of brain after local cortical trauma, III, 572, 718.
- Bennett, A. E., metrazol convulsive shock therapy in affective psychoses, III, 299. Curare and shock therapy, III, 335.
- Bennett, A. L. See Wagner, J. C.
- Bennett, A. R., and Polanyi, M., influence of acidity on catalytic exchange of hydrogen and water, I, 167.
- Bennett, C. See Kirk, P. L.
- Bennett, C. E., optical dispersion and molar refraction at zero frequency for compressed nitrogen, argon, and carbon dioxide measured as functions of density, I, 388.
- Bennett, C. W., nomenclature of plant viruses, III, 357.
- Bennett, D. J., Ramage, G. R., and Simonson, J. L., resolution of *dl*- Δ^2 -cyclogeranic acid, II, 219.
- Bennett, E., are pectic substances precursors to lignin? I, 362.
- Bennett, G. A., and Shaffer, M. F., passage of proteins from vascular system into joints and other body cavities, III, 381.
- See also Shaffer, M. F.
- Bennett, H. S., localisation of adrenal cortical hormone in adrenal cortex of cat, III, 411. Nitrocellulose in amyl acetate as embedding medium, III, 786. Life history and secretion of cells of adrenal cortex of cat, III, 876.
- and Kilham, L., blood vessels of adrenal gland of adult cat, III, 836.
- Bennett, M. A., metabolism of sulphur. X. Replaceability of *dl*-methionine in diet of rats with its partly oxidised derivative, *dl*-methionine sulphoxide, III, 56. Social hierarchy in ring-doves. II. Effect of treatment with testosterone propionate, III, 811.
- Bennett, R. L. See Krusen, F. H.
- Bennett, W. E., and Bonner, T. W., γ -ray resonances from the bombardment of carbon by deuterons, I, 383.
- Bonner, T. W., Hudspeth, E., and Watt, B. E., protons from $^{13}\text{C}+^2\text{H}$, I, 426.
- See also Bonner, T. W.
- Bennhold, H., importance of plasma for function of blood, III, 187.
- Benning, A. F., and McHarness, R. C., thermodynamic properties of fluorochloro-methanes and -ethanes, I, 248, 315.
- McHarness, R. C., Markwood, W. H., jun., and Smith, W. J., thermodynamic properties of fluorochloro-methanes and -ethanes, I, 352.
- Bennister, H. L., King, Alexander, and Thomas, R. K., stability of emulsions. III. General survey of solid emulsifying agents with special reference to the hydrous oxides and hydroxides, I, 439.
- Benoit, M. See Benoit, P. H.
- Benoit, P. H., and Beauvallet, M., effect of cold and calcium ions on response of the striated muscle to acetylcholine or constant currents, III, 196.
- and Benoit, M., excitatory state produced by brief stimulation of striated muscle, III, 196.

- Benotti, J., cold extraction apparatus, I, 273.
- Benotti, N. See Ginsburg, E.
- Benrath, A., and Neumann, E., system $\text{CoCl}_2\text{-NH}_4\text{Cl-H}_2\text{O}$, I, 117.
- and Ritter, G., reciprocal salt pair $\text{CoSO}_4 + (\text{KCl})_2 = \text{CoCl}_2 + \text{K}_2\text{SO}_4$. II, I, 117.
- Bensley, E. H., toxic effects of sulphanilamide and related compounds, III, 599.
- and Wilen, B., methämoglobinemia and sulphämoglobinemia due to sulphanilamide, III, 246.
- See also Fowler, A. F.
- Benson, E. H. See Cannon, E. F.
- Benson, J. A. See Wile, U. J.
- Benson, K. W., dilatation of bile ducts and its relation to distress after cholecystectomy, III, 502.
- Benson, O. O., jun. See Cusick, P. L.
- Benson, R. A., Stear, A., and Speer, F. D., gonorrheal vaginitis of children [relation to blood-estrogen and vaginal pH], III, 31.
- Benson, R. L., hypersensitiveness to bee and mosquito, III, 339.
- Bent, H. E., and Krimbill, C. A., absorption cells for dense liquids, I, 374.
- See also Jacobsohn, S.
- Bentenrieder, A., connective tissue of wall of human intestine, especially serosa; relations of vessels and Kerkring's folds, III, 1.
- Benton, A. F. See Gwathmey, A. T.
- Benton, F. L. See Wolfrom, M. L.
- Bentz, W., and Oehme, C., "basal metabolism." II. Effect of optical isomerides of valine on basal metabolism, III, 326.
- Benz, E. W. See Cressman, R. D.
- Benzinger, T., Opitz, E., and Schoedel, W., stimulation of respiration by oxygen lack, III, 478.
- Benzon, B. See Grossmann, M.
- Bequignon, R. See Levaditi, C.
- Beranek, Z., osmotic resistance of the reticulocytes, III, 283.
- Berard, L., Morel, A., Arloing, F., Josseland, A., and Perrot, L., use of complex ferrico-sodium salts prepared from dehydroascorbic acid having open lactone ring in cancer treatment, III, 425.
- Beraud, P., influence of nitrogenous nutrition on respiratory and fermentative powers of baker's yeast, III, 537.
- Berberich, J., pupillary reactions in affections of ear, III, 893.
- Berbier, H., auxin-like substances in chick embryo, III, 4. Auxin-like substances in incubated egg and adult chicken, III, 4.
- Berblinger, W., pars intermedia of human pituitary, III, 207. Pars intermedia of pituitary gland in man and cattle, III, 641. Hypophyseal disturbances, III, 730.
- Bercovitz, Z., cellular exudates of bowel discharges. I. Control observations in 1123 patients, 7 autopsies, and 3 dog experiments, III, 664.
- and Fuller, C. G., colour photography through sigmoidoscope, III, 908.
- Berditschevskaja, D. L., and Dankov, P. D., primary stages in the formation of black platinum, I, 167.
- Berenblum, I., Chain, E., and Heatley, N. G., metabolism of normal and neoplastic skin epithelium, III, 507. Carbohydrate metabolism of tumours, III, 747.
- Berenblum, L. S. See Delimarski, J. K.
- Berencsi, G. See Goreczky, L.
- Berens, C., prism scale, III, 395.
- and Stein, L., group colour vision tests, III, 25.
- Berenstein, S., glutathione concentration in blood, III, 561.
- Berenz, L. I., and Frost, A. V., effect of alkyl iodides on decomposition of cyclohexane, II, 122.
- Beretta, A., and Camia, M., electrocardiographic changes during treatment of schizophrenia by cardiazol, III, 14.
- Berg, A. A. See Winkelstein, A.
- Berg, F. F. See Barthen, C. L.
- Berg, G. J. van den. See De Haas, W. J.
- Berg, M., production of peptic ulcers by vasomotor alterations (pitressin episodes), III, 500.
- Berg, R., and Becker, (Frl.) E., new test for hydroxylamine by formation of "indo-oxino" [5-(8'-hydroxy-5'-quinolinyl)imino-8-keto-5:8-dihydroquinoline], II, 382.
- Bergamaschi, M. See Pollacci, G.
- Bergami, G., Scoz, G., and Guzzi, L., effect of synthetic vitamin-K (2-methyl-1:4-naphthaquinone) on prothrombin content of normal rabbit's blood, III, 880. Determination of coagulation time of blood by Quick's method, III, 880.
- Bergeim, F. H., Coy, N. H., and Lott, W. A., 2-sulphanilamido-4-ethylthiazole, II, 332.
- See also Lott, W. A.
- Bergenfeldt, E., abdominal pregnancy, III, 905.
- Berger, A. T. See Nadler, J. E.
- Berger, E. See Rothschild, F.
- Berger, J., and Asenjo, C. F., anthelmintic activity of fresh pineapple juice, III, 250. Anthelmintic activity of crystalline papain, III, 759.
- and Johnson, M. J., occurrence of leucyl-peptidase, III, 448. Activation of dipeptidases, III, 609.
- Johnson, M. J., and Peterson, W. H., proteolytic enzymes of bacteria. II. Peptidases of common bacteria, III, 934.
- Berger, W. E., second dissociation constant of acids derived from phthalic acid, I, 163.
- Bergfeld, W., thyroid gland and nutrition, III, 894.
- Berggren, W. P., absorption law for total radiation measurements, I, 344.
- Berghe, L. van den, new indexes demonstrating degree of anisocytosis in human blood, III, 467.
- and Styns, J., hematological changes during stay in rarified atmosphere, III, 295.
- Bergman, A. G. See Feigelson, I. B., and Kurnakov, N. S.
- Bergman, A. J., Houchin, O. B., and Turner, C. W., extraction and separation of anterior pituitary hormones, III, 120.
- Meites, J., and Turner, C. W., comparison of methods of assay of lactogenic hormone, III, 495.
- Bergman, H. C., and Drury, D. R., acute renal insufficiency, III, 138.
- See also McKay, E. M.
- Bergman, R., treatment of erysipelas with or without sulphanilamide, III, 920.
- Bergmann, E., and Berlin, T., structure of fluorene, II, 179.
- Bergmann, E., Farkas, L., and Sandler, L., method for separating para-hydrogen from oxygen and carbon monoxide, I, 230.
- and Weizmann, A., dipole moment of 1-chloroanthraquinone, I, 98.
- See also Bergmann, F., and Weizmann, M.
- Bergmann, F., and Bergmann, E., reactivities of dienes, especially toward maleic anhydride. II, II, 308.
- See also Adler, S.
- Bergmann, M., biological aspects of protein chemistry, II, 59.
- See also Doherty, D. G., Fruton, J. S., Hofmann, K., and Stein, W. H.
- Bergmann, W., fission of digitonides, II, 128. Effect of pinal extracts on vascular system in frogs, III, 565.
- and Skau, E. L., unsaturated steroids. VII. Action of perbenzoic acid on Δ^2 -cholestadene, II, 329.
- Stavely, H. E., Strong, L. C., and Smith, G. M., effects of irradiated cholesterol on [tumour formation in] skin of mice, III, 422.
- Bergner, K. G. See Merz, K. W.
- Bergstrom, F. W., catalytic formation of potassium nitrite from potassium nitrate in liquid ammonia, I, 416.
- See also McCrosky, C. R.
- Bering, B. P. See Tarasov, V. V.
- Beritov, I., origin of acetylcholine contracture, III, 19. Physiological properties of nerveless region of skeletal muscle, III, 19.
- Berk, J. E., dihydrotachysterol (A.T. 10) in idiopathic hypocalcemia, III, 208. Circulation time (magnesium sulphate method) in diagnosis of peripheral vascular disease, III, 476.
- Berk, L., secondary sex characters of male *Xenopus [lewis]*: the pads, III, 739.
- Berkem, R., formation of tungstates of barium, strontium, calcium, and lead as a function of pH, I, 369.
- Berkenau, P., relationship between disturbance of liver function and mental disease, III, 909.
- Berkenheim, A. M., and Dankova, T. F., reaction of elimination of hydrogen bromide from aliphatic dibromides, II, II, 190.
- Berkman, S. See Dorfman, A.
- Berkow, S. G., and Jacobson, M. B., photoelectric plethysmography of female breast, III, 709.
- Berkson, J., Magath, T. B., and Huru, M., error of estimate of blood cell count as made with the haemocytometer, III, 468.
- See also Matthews, M. W.
- Berl, E., and Koerber, W., gas-volumetric semi-micro-determination of carbon; wet method for aliphatic and cyclic compounds, II, 239.
- Berlin, A. J., 2(3)-nitrophenylene-1:4-diarsinic acid, II, 198.
- Berlin, R., and Nylén, C. O., position nystagmus and head trauma, III, 889.
- Berlin, T. See Bergmann, E.
- Berliner, K., α -lobelino for measurement of circulation time, III, 633.
- Berman, A. L., and Ivy, A. C., toxicity of various iodine solutions, III, 156.
- Snapp, E., Hough, V. S., and Ivy, A. C., keto-reacting substances in bile of dogs, III, 743.

- Berman, A. L., Snapp, E., Ivy, A. C., and Atkinson, A. J., effect of long-continued ingestion of oxidised bile acids on the dog and rat [on liver], III, 909.
See also Schmidt, C. R.
- Berman, H., and Wolte, C. W., crystallography of aramayoite, I, 48.
- Berman, R. L. See Frank, R. T.
- Bernadiner, M. P. See Morgulis, N. D.
- Bernal, J. D., M. V. Lomonosov, 1711—1765, I, 378.
- Bernard, E., Manneback, C., and Verleysen, A., potential function of the plane oscillations of benzene; calculation of the normal plane vibration frequencies of $s\text{-C}_6\text{H}_6\text{D}_2$, $p\text{-C}_6\text{H}_6\text{D}_4$, and $p\text{-C}_6\text{H}_4\text{D}_2$, I, 99, 198.
- Bernard, R., excitation conditions of various band systems of the neutral and ionised nitrogen molecule, I, 137.
and Fouillouze, (Mlle.) R., excitation function of bands of the first positive system of the nitrogen molecule, I, 7.
- Bernard-Pichon. See Heuyer, M.
- Bernardini, G., heavy electron and cosmic rays, I, 54.
See also Ageno, M.
- Bernart, F., history, symptoms, and treatment of eclampsia, III, 307.
- Bernays, P. M. See Young, R. C.
- Berndel, J., filters with pores of known and equal size down to the size of colloidal particles, I, 273.
- Berndt, W. See Suhrmann, R.
- Bernfeld, P. See Meyer, K. H.
- Bernhard, C. G., experimental studies on conditioned salivary reflexes in children, III, 889.
- Bernhard, K., and Schoenheimer, R., inertia of highly unsaturated fatty acids in the animal, investigated with deuterium, III, 596. Rate of formation of stearic and palmitic acids in normal mice, III, 596.
- Bernhardt, H., causation and treatment of gout, III, 242.
- Bernhart, F. W., mol. wt. of ovalbumin, III, 315.
See also Arnow, L. E.
- Bernheim, A. I. See Penner, A.
- Bernheim, F., effect of fatty acids on choline-oxidase of rat liver, III, 447. Action of papain and trypsin on dehydrogenases, III, 448. Effect of copper and phenylhydrazine on dehydrogenases, III, 607. Effect of salicylate on oxygen uptake of the tubercle bacillus, III, 936.
and Bernheim, M. L. C., action of 4-amino-2-methyl-1-naphthol on oxidation of thiol groups, II, 269.
and Felsoyanyi, A. von, co-enzyme concentration of tissues, III, 815.
and Handler, P., catalytic action of 8-hydroxyquinoline on the oxidation of p -phenylenediamine, I, 297.
- Bernheim, M. L. C. See Bernheim, F.
- Bernheimer, L. B. See Soskin, S.
- Bernigau, H., structural changes of granulocytes after administration of amidopyrine, III, 183.
- Bernkopf, H. See Kligler, I. J.
- Bernoulli, A. L., and Loebenstein, A., dissociation constants of uric acid, I, 214.
- Bernstein, A., infectious mononucleosis, III, 790.
- Bernstein, F., Birnbaum, Z. W., and Achs, S., is or is not cancer dependent on age? III, 45.
- Bernstein, H. See Whitmore, F. C., and Wood, H.
- Bernstein, H. J. See Langseth, A.
- Bernstein, J., and Miller, William T., chloro-fluoroethanes as solvents for cryoscopic determination of mol. wt., I, 249.
- Bernstein, J. C., hemosiderin histiocytoma of skin, III, 43.
- Bernstein, J. G., variations in histological structure of adrenal cortex of albino rat as result of artificial fever induced by ultra-high-frequency radio waves, III, 726.
- Bernstein, M., and Simkins, D., magnesium: effects of intravenous injections on human heart, III, 98.
- Bernstein, P., and Feresten, M., oestrogenic effects on tubal contractility and vaginal secretion in menopause, III, 735.
- Bernstein, S., X-ray and optical properties of built-up films, I, 210.
- Bernstein, S. S. See Beach, E. F.
- Bernstein, T. B. See Feinberg, S. M.
- Bernstien, J., and Gillis, L., otosclerosis and sex hormones, III, 301.
- Berthall, T., and Weeks, W. F., respiratory and vasomotor effects of variations in carotid body temperature; mechanism of chemoreceptor stimulation, III, 104.
- Bernton, H. S., Spies, J. R., and Stevens, H., significance of cottonseed sensitivity, III, 528.
See also Spies, J. R.
- Berry, C. M. See Dey, F. L.
- Berry, C. T., glauconite pseudomorphs after Ophiuran plates, I, 380.
- Berry, G. P. See Syvertson, J. T.
- Berry, K. L., and Sturtevant, J. M., optical activity of α -bromopropionitrile, II, 72.
- Berry, L. G., composition and optics of copiapite, I, 240.
- Berry, W. E. See Rao, Y. V.
- Bersutski, V. P., fruit of *Ferula jeschkeana*, Vatke, III, 273. *Ferula karatavica*, Rgl. et Schmal, III, 461.
- Bertagni, P., iron content of liver and spleen in ox fetus of varying age, III, 417.
- Berthelot, A., Amoureux, G., and Deberque, S., formation of 3-indolylacetic acid by ultra-violet rays, III, 258.
- Prévo, A. R., Amoureux, G., and Boorsma, H. J., relation between the nitrogen content of constituents of the culture medium and tetanus toxigenesis, III, 266.
- Berthier, P., specific coefficient of magnetisation of methaemoglobin, I, 64. Imbibition of methaemoglobin, solutions by cellulose, III, 607.
See also Boutaric, A.
- Berti, V. See Pratesi, P.
- Bertoldi, M., investigation of elimination of ascorbic acid in urine of cataractous patients, III, 573.
- Bertrand, D., determination of very small amounts of molybdenum, applicable to biological media, I, 132.
- Bertrand, G., disputed presence of magnesium in pollen, III, 694.
- Backer, H. J., and Haack, N. H., laccol, II, 80.
and Silberstein, L., distribution of boron in structure of the tobacco plant, III, 273.
and Vladesco, R., effect of cobra venom on blood-sugar of guinea-pig and rabbit, III, 156.
- Bertrand, J. See Lespagnol, A.
- Besley, A. K., goat's milk, III, 504.
See also Gamble, J. A.
- Besly, D. M. See Baker, W.
- Bessau, C., and Unse, W., plasma therapy of dehydrated infants, III, 186.
- Bessemans, A., Wittebolle, P., and Devynst, R., agglutination in antileptospira serum, III, 829.
- Bessey, O. A. See Boyle, P. E., and Wolbach, S. B.
- Best, A. T. See Huxley, J. S.
- Best, C. H., Campbell, J., and Haist, R. E., anterior pituitary extracts and insulin content of pancreas, III, 207.
- Haist, R. E., and Ridout, J. H., diet and insulin content of pancreas, III, 124.
and Ridout, J. H., lipotropic action of methionine, III, 433.
and Solandt, D. Y., concentrated serum in shock, III, 789. Experimental shock, III, 885.
See also Barrett, H. M., Haist, R. E., and Solandt, D. Y.
- Best, R. J., virus activity as a property of protein molecules, III, 77. Plant viruses, III, 358. Effects of salicylate on plant viruses, III, 544.
- Best, R. R., cod-liver oil per rectum as adjunct in treatment of ulcerative colitis, III, 39.
- Besta, C., active concentration of reagents in Wassermann tests, III, 76.
- Beste, G. W., and Hammett, L. P., rate and mechanism in the reactions of benzyl chloride with water, hydroxyl ion, and acetate ion, I, 415.
- Beth, E. W. See Batdorf, S. B.
- Beth, R. A., apparent discrepancy among experimental measurements of the atomic constants, I, 336.
- Bethe, H. A., meson theory of nuclear forces. I. General theory. II. The deuteron, I, 190. Continuum theory of the compound nucleus, I, 342. Deviations from evaporation model of nuclear reactions, I, 342. Barytron theory of nuclear forces, I, 385.
and Henderson, W. J., incorrect assignment of the supposed ^{27}Si radioactivity of 6.7-minute half-life, I, 52.
and Konopinski, E. J., alternative description of compound nucleus, I, 342.
Korff, S. A., and Placzek, G., interpretation of neutron measurements in cosmic radiation, I, 280.
and Nordheim, L. W., theory of meson decay, I, 310.
See also Holloway, M. G., Konopinski, E. J., and Marshak, R. E.
- Bethea, W. R. See Anderson, W. A. D.
- Bethell, F. H., Gardiner, S. H., and MacKinnon, F., influence of iron and diet on blood in pregnancy, III, 376.
See also Isaacs, R.
- Betti, M., and Lucchi, E., asymmetric catalysis; absolute asymmetric synthesis, I, 227.
- Bettman, R., and Spier, E., concentration of sulphanilamide in human bile, III, 59.
- Betz, H. See Günther-Schulze, A.
- Betz, K. See Linhard, M.
- Beucker, H. See Criegee, R.
- Beumer, H., and Schwartz, K., trans-fusion of plasma-free erythrocytes, III, 627.
- Beuschlein, W. L., and Simenson, L. O., solubility of sulphur dioxide in water, I, 206.
- Beutell, M., measurements of intensity of the principal series of caesium in the caesium-neon discharge, I, 137.

- Beutler, H., and Metropolis, N., high-power tungsten light source, I, 374.
- Beuter, R., local anticonvulsive action of calcium salts, III, 334. Procaine base dissolved by means of carbon dioxide and its mode of action, III, 334.
- Landay, J., and Lieberman, A., jun., evidence for local effect of mercurial diuretics, III, 759.
- Bevin, S. See Hoskins, R. G.
- Bexelius, G., congenital pyloric stenosis without vomiting, III, 906.
- Beyaert, M., and Govaert, F., amino-derivatives of pentaerythritol. IV. Tri-(aminomethyl)hydroxymethylmethane. V. Aminomethyltri(hydroxymethyl)-methane, II, 7.
- Beyer, E. M., trichrome stain for astrocytes, III, 702.
- Beyer, H. G., Carroll, H., Witcher, C. W., and Dunning, J. R., dependence of magnetic scattering of neutrons on the magnetisation of iron, I, 383.
- and Whitaker, M. D., interference phenomena in the scattering of slow neutrons, I, 307.
- See also Carroll, H., and Powers, P. N.
- Beyer, K. H., and Skinner, J. T., detoxication and excretion of β -phenylisopropylamine (benzedrine), III, 525.
- Beyne, J., and Gougerot, L., pulmonary tissue temperature during changes of respiratory regime, III, 387.
- Beynon, W. J. G., magneto-optic and natural dispersions of isobutyl butyrate and ethylene dichloride, I, 11.
- Bezler, R. See Back, E.
- Bezrukov, P. L., contact metamorphism of phosphorites, I, 48.
- Bezssonoff, N., Vertruyen, H., Dietz, E., and Mehl, R., vitamin-C content of cerebrospinal fluid in children, III, 235.
- and Woloszyn, M., occurrence of a semi-oxidised reversible form of vitamin-C in tissues, III, 235.
- Bezzi, S., determination of the weights of macro-molecules, I, 211. Viscosity and solvation. II, I, 250. Integrating photometer for X-ray photograms, I, 374. Inulin and its mol. wt., II, 156.
- and Croatto, U., cellulose acetate, I, 152.
- and Marangoni, C., polybenzyls and derivatives, I, 152.
- Bezzubetz, M. K., and Ignatiuk-Maistrenko, V. A., preparation of 6-chlorophenylene-thiazolium compounds, and their stability, II, 58.
- Bhabha, H. J., classical theory of electrons, I, 280. Elementary heavy particles with any integral charge, I, 309. Classical theory of spinning particles, I, 309. Classical theory of point dipoles, I, 342.
- Carmichael, H., and Chon, C. N., production of bursts and spin of the meson, I, 54.
- Bhadoria, B. S., geology of chromite deposit of Johohatu, Singhbhum, I, 379.
- Bhaduri, B. See Singh, B. K.
- Bhaduri, P. N., effects of different forms of colchicine on roots of *Vicia faba*, L., III, 547. Improved smear method for rapid double staining, III, 786. Cytological studies in *E. coli* with special reference to relation of chromosomes to nucleoli, III, 877.
- and Semmens, C. S., advantages of uranium fixation in modern cytological technique, III, 777.
- Bhagavantam, S., occurrence of overtone lines in Raman effect, I, 56. Effect of crystal orientation on the Raman spectrum of calcite, I, 95, 195.
- Bhagwat, V. K., and Shahane, R. Y., synthesis of 2-acylresorcinols by the "Nidhon" process. VI. 2-n-Valeryl- and -m-toluoyl-resorcinol, II, 132. Synthesis in the furcoumarin group. VII. Angular and linear furcoumarins, II, 139.
- Bhagwat, W. V., application of Beer's law of absorption to solutions, I, 290.
- See also Deshapande, S. S.
- Bhatnagar, S. S., Kapur, P. L., and Kaur, (Miss) G., photopolymerisation of anthracene in benzene solution from the magnetic viewpoint, I, 153. Polymerisation of anthracene to di-anthracene from the magnetic standpoint, I, 245. Magnetic study of polymerisation of styrene, I, 313.
- Prakash, B., and Maheshwari, J. C., magnetism and molecular constitution of manganese compounds, I, 15.
- Prakash, B., and Singh, J., magnetism and catalysis. I. Catalytic decomposition of potassium chlorate by manganese dioxide and ferric oxide. II. Catalysis of persulphate and iodide reaction by ferrous ions, I, 261.
- Bhattacharya, D. K. See Prasad, K.
- Bhattacharya, H. P. See Roy, P.
- Bhave, V. M., and Limaye, D. B., condensation of acetonedicarboxylic acid with phenols and phenolic ethers. III. 4:6-Dimethoxy-m-phenylenebis- β -glutaconic acid, II, 130.
- See also Limaye, D. B.
- Bhide, B. V., and Bhide, R. D., dielectric properties of glycerides. II., I, 98.
- See also Phalnikar, N. L.
- Bhide, R. D. See Bhide, B. V.
- Bhimasenachar, J., modified method of using Poiseuille's apparatus, I, 42.
- and Venkateswarlu, K., ultrasonic velocities and adiabatic compressibilities of organic liquids, I, 201.
- Bialasiewicz, K., and Landau, C., mineral composition of haemolymph of silkworms, III, 44.
- and Lewin, M., composition of crop secretion of pigeons after hatching, III, 128.
- Biale, J. B., effect of emanations from fungi on citrus fruits, III, 830.
- Biberstein, H., effect of unilateral cervical sympathectomy on reactions of the skin, III, 844.
- Bibler, W. G. See Eichelberger, L.
- Bick, M., biochemical changes occurring during storage of human blood, III, 92.
- Bickel, A., nutritive value of freshly ground and of stored rye whole flour as deduced from effect on liver-glycogen, III, 47. Dependence of metabolic action of amino-acids on nature of protein diet, III, 432.
- Bickel, A. F. See Wibaut, J. P.
- Bickel, G., B., avitaminosis and heart disease, III, 15. B., Avitaminosis and heart failure in pregnancy, III, 15.
- Bickford, C. F., Jurist, A. E., and Christiansen, W. G., determination of iron in iron salts of organic acids containing phosphorus, II, 145.
- Bickford, R. G., fibre dissociation produced by cooling human nerves, III, 480.
- Bickley, E. A. [with Gardner, J. H.], action of Grignard reagents on heavy-metal salts. IV. Mechanism of the reaction with silver bromide, II, 198.
- Bicknell, F., vitamin-E in muscular dystrophies and nervous diseases, III, 325.
- Biddulph, C., Meyer, R. K., and Gumbreck, L. G., influence of oestriol, oestradiol, and progesterone on secretion of gonadotrophic hormones in parabiotic rats, III, 650.
- Bidwell, C. C., precise method of measuring heat conductivity applicable to either molten or solid metals; thermal conductivity of zinc, I, 40.
- Bidwell, C. C., thermal conductivity of metals, I, 435.
- Bieler, A. See Guyer, A.
- Bieler, G., effect of *Rhizobium* on growth of cress roots, III, 687.
- Bierbaum, R. L. See Klassen, K. P.
- Bierman, W., conductive cooling of living human tissue, III, 314.
- See also Doubilet, H., Friedlander, M., and Peck, S. M.
- Bierry, H., Andrac, M., and Gouzon, B., difference in the behaviour of [syphilitic] reagins and haemolysins with certain globulins, III, 359.
- Gouzon, B., and Magnan, C., n-acetylglucosamine and blood-proteins, III, 380.
- Bieter, R. N., Larson, W. P., Cranston, E. M., and Levine, M., administration of drugs in food for chemotherapy studies in mouse pneumococcus infections, III, 436.
- See also Cranston, E. M., Larson, W. P., Levine, M., and Seery, T. M.
- Bigelow, C. R. See Norton, L. B.
- Bigelow, L. A. See Calfee, J. D., and Young, De W. S.
- Bigger, J. W., Blacklock, J. W., and Parish, H. J., sterilisation of syringes and needles, III, 778.
- Biggs, B. S. See White, A. H.
- Biggs, L. A., recovery from discharge of an impulse in single visual receptor unit, III, 723.
- Bigler, J. A., Hardy, L. M., and Scott, H. W., cryptorchidism treated with gonadotropic preparations. III. Surgical repair of cryptorchidism with and without gonadotropic therapy, III, 34.
- Bignardi, C., mucous and mucoid cells, III, 88. Enterochromaffin cells and argentophil cells in reptilian pancreas, III, 280.
- Bigwood, E. J., reactions between electrolytes and proteins. IV. Reactions with calcium and magnesium: methods. V. Reactions with calcium and magnesium: results, I, 71, 81.
- Bijlmer, H. J. T., anthropology of the Netherlands, III, 279.
- Bijlsma, U. G. See Dongen, K. van.
- Bikerman, J. J., electrokinetic equations and surface conductance; survey of the diffuse double layer theory of colloidal solutions, I, 114. Contact angles of built-up multilayers, I, 160.
- Bilevitch, A. V. See Belopolski, A. P.
- Bilbin, G., molecular dissociation in the magma as a factor in its characterisation, I, 135.
- Billeter, J. R. See Fourneau, E.
- Billheimer, J. S., Faust, P. H., and Swift, E. H., correcting ignited silica precipitates for non-volatile material, I, 371.
- Billiet, V., and Vandendriessche, A., dehydration of natural hydrated copper and cobalt oxides (X-ray investigation), I, 180.
- Billings, O. B. See Laubengayer, A. W.

- Billingslea, F. Y., treatment of extreme cases of "sniffles" in rat with sulphapyridine, III, 438.
- Billman, J. H., Tripp, G. E., and Cash, R. V., carbon suboxide in the Friedel-Crafts reaction. I, II, 223.
- Biltz, W. See Heimbrecht, M., Könneker, A., Söffe, K. H., Strotzer, E. F., and Zumbusch, M.
- Binder, A., influence of reproductive hormones on motility of Fallopian tube; action of corpus luteum hormone, III, 903.
- Binet, L., Bochet, M., and Bryskier, A., respiration in atmospheres with high oxygen content, III, 18.
- Marquis, M., and Moynier, R., dissociation of carboxylhaemoglobin in the isolated lung, III, 195.
- Pérel, L., and Glotz, (Mlle.) G., effect of sodium thiosulphate on coproporphyrinuria in experimental lead poisoning in rabbit, III, 603.
- and Strumza, M. V., respiratory distress after hæmorrhage and its treatment with oxygen, III, 388.
- Strumza, M. V., and Samaras, A., effect of anoxæmia on kidney, III, 41.
- Strumza, M. V., and Voghel, D., anoxæmia and acapnia, III, 18.
- and Weller, G., determination of glutathione, III, 619.
- Weller, G., and Robillard, E., effect of thiol compounds on bee's venom, III, 226.
- Binford, C. H., primary amyloid disease of myocardium and blood vessels, III, 475.
- Bing, F. C. See Free, A. H., and Lederer, L. G.
- Binger, M. W. See Goudsmit, A., and Madding, G. F.
- Bini, A., vascular system of fatty tissues, III, 88. Behaviour of capillaries in muscle of empty and distended stomach, III, 841.
- Biniecki, S. See Späth, E.
- Binkley, S. B., McKee, R. W., Thayer, S. A., and Doisy, E. A., constitution of vitamin-K₂, II, 283.
- See also MacCorquodale, D. W., McKee, R. W., Richert, D., and Thayer, S. A.
- Binkley, W. W. [with Degering, E. F.], organic syntheses with sulphuryl chloride, II, 70.
- Binotto, A. See Ottaviani, G.
- Binswanger, H., action of insulin in tabetic crises, III, 198.
- Binz, A. H., and Pence, L. H., derivatives of thiolmethylamine, II, 27.
- Reinhart, F. E., and Winter, H. C., reaction between hydrogen selenide, formaldehyde, and *sec*-amines, II, 110.
- Binzley, R. F. See Brill, H.
- Biquard, (Mlle.) D., and Grammatieakis, P., absorption of phenylhydrazides in the medium ultra-violet, I, 93.
- Birch, F., α - γ transformation of iron at high pressures and the earth's magnetism, I, 200.
- and Bancroft, D., elasticity of crystals, I, 405.
- and Clark, H., thermal conductivity of rocks and its dependence on temperature and composition. I. and II., I, 398.
- Birch, L. See Zisserman, L.
- Birch, T. W., and György, P., curative factor (vitamin-H) for egg-white injury, III, 146.
- Bircumshaw, L. L., and Harris, I., lead suboxide, I, 36.
- Bird, H. R., and Culston, T. G., generalised oedema in chicks prevented by *dl*- α -tocopherol, III, 842.
- Birdsell, J. B., and Boyd, W. C., blood groups in Australian aborigines, III, 836.
- Birkhäuser, H., and Süllmann, H., enzymic hydrolysis of acetylneurin and acetylcholine, III, 260.
- See also Zeller, E. A.
- Birkhaug, K. E., bacteriostatic effect of sulphapyridine, sulphanilamide, and prontosil rubrum *in vitro* on mycobacteria, III, 246. Distribution and excretion of sulphapyridine in guinea-pig, III, 246.
- Birkinshaw, J. H., and Findlay, W. P. K., biochemistry of wood-rotting fungi. I. Metabolic products of *Lentinus lepideus*, Fr., III, 262.
- Findlay, W. P. K., and Webb, R. A., biochemistry of wood-rotting fungi. II. Acids produced by *Coniophora cerebella*, Pers., III, 692.
- Birkmayer, W., epileptiform attacks in patient with tumour of carotid body, III, 24.
- Birkofer, L., 4:5-dimethylacetylsalicylic acid, II, 220.
- See also Weygand, F.
- Birks, A. M., and Wright, G. F., catalysis in formation of α -methoxy-mercurials from ethylenes, II, 384.
- Birnbaum, N., and Edmonds, S. M., new applications of the silver reductor; determination of uranium and copper, I, 270.
- See also Edmonds, S. M.
- Birnbaum, Z. W. See Bernstein, F.
- Biró, I., heredity of glaucoma, III, 639.
- Birrell, J. F., zinc ionisation in treatment of allergy in nose, III, 928.
- Birse, E. A. B., and Melville, H. W., reaction of atomic hydrogen with hydrazine, I, 262. Photolysis of ammonia, I, 262.
- Bisanz, R., and Kroupa, E., determination of fluorine and silicic acid in the Gastein thermal springs, I, 173.
- Bischoff, F., picric and picrolonic acid precipitates of gonadotropic extracts, III, 403. Chemical studies on pituitary "antagonist," III, 642. Action of cysteine or cyanide on gonadotropic extracts, III, 850. Non-specific augmentation with highly purified follicle-stimulating hormone fraction (Evans), III, 899.
- and Long, M. L., local effect of zinc on development of Marsh-Buffalo adenocarcinoma, III, 227. Local influence of zinc on development of thymomas in Marsh-Buffalo mice, III, 506.
- Long, M. L., and Rupp, J. J., influence of induced hibernation on mouse sarcoma 180, III, 816.
- See also Long, M. L.
- Bisgard, J. D., transplanted epiphyseal cartilage, III, 622.
- and Macumber, H. H., influence of bone ash on repair of bone, III, 698.
- See also Drummond, D. H., and Tollman, J. P.
- Bishop, A. J. See Brown, Milton H.
- Bishop, G. H., and O'Leary, J. S., electrical activity of lateral geniculate of cats following optic nerve stimuli, III, 804.
- See also Bartley, S. H.
- Bishop, K. See Scudder, J.
- Bishop, P. M. F., Bowes, R. K., Boycott, M., Kellar, R., MacGregor, T. N., and Murless, B. C., clinical use of stilbæstrol dipropionate and hexæstrol, III, 656.
- Bishop, W. A., calcification of supraspinatus tendon, III, 621.
- Bishop, W. S. See White, A. H.
- Biskind, G. R., inactivation of methyltestosterone in castrate male rats, III, 582.
- and Mark, J., inactivation of testosterone propionate and estrone in rats, III, 131.
- See also Mark, J.
- Biskins, G. R. See Carnes, W. H.
- Biskupski, V., apparatus for rapid determination of arsenic in presence of antimony, I, 173.
- Bisset, K. A., structure and mode of growth of bacterial colonies morphologically intermediate between *R* and *S* forms, III, 172.
- Bissonnette, T. H., and Wilson, E., length of daylight period and pelt cycle of the mink, III, 69.
- Biswas, H. G., and Das, K. L., vitamin-C content of chillies, onion, and garlic, in raw state and boiled with water, III, 145.
- Biswas, H. K. See Chopra, R. N.
- Bitskei, J., Volhard and gravimetric determinations of chloride, I, 172. Stirring machine, I, 177.
- Bitter, F., and Kaufmann, A. R., magnetic studies of solid solutions. I. Precipitation of iron from copper, I, 67.
- See also Harrison, G. R.
- Bitterlin, O. See Erlenmeyer, H.
- Bittner, J. J., influence of transplanted normal tissue on breast cancer ratios in mice, III, 227. Foster nursing and lung cancer in "A" stock mice, III, 423. Possible method of transmission of susceptibility to breast cancer in mice, III, 670.
- Bixby, E. M., does hæmolytic streptococcus infection or sulphanilamide affect the α -hæmolysin of serum? III, 520.
- See also Benda, C. E.
- Bizard, G. See Lespagnol, A.
- Bizet, E., and Raymond-Hamet, vascular effects of nicotine in adrenalectomised animal, III, 249.
- Bjering, T., and Øllgaard, E., [renal] sulphate clearance, III, 137.
- Björnsthål, Y., synchronising the illumination for an ultracentrifuge, I, 272.
- Blacet, F. E., Sellers, A. L., and Blaedel, W. J., micro-analysis of gases; acetylene, benzene, and some procedure modifications, II, 318.
- and Taurog, A., photolysis of azomethane and of azomethane-acetaldehyde mixtures, I, 34.
- Black, A. See Forbes, E. B.
- Black, C. E. See Stovall, W. D.
- Black, D., and Leese, A., nitrogen and chloride metabolism in gastroduodenal hæmorrhage, III, 584.
- Black, D. A. K., basal metabolism in "gastro-intestinal bleeding, III, 415.
- Powell, J., and Witts, L. J., absorption of iron, III, 791.
- Black, H. C., and Overley, C. A., synthetic glycerides of unsaturated fatty acids. I. Mono- and tri-linolein, II, 4.
- Black, L. M., inhibition of virus activity by insect juices, III, 358.

- Black, S., Frost, D. V., and Elvehjem, C. A., relation of vitamin-B₆ and pantothenic acid to factor W, III, 234. See also McKibbin, J. M.
- Black, S. H. See Hopkins, R.
- Black, T. L., and Arnold, A., simplified inoculation procedure, III, 687.
- Blackburn, J. M. See Golla, F. L.
- Blackett, P. M. S., cosmic rays, I, 54. Recent experiments on cosmic rays, I, 190.
- Blackfan, K. D. See May, C. D., and Shohl, A. T.
- Blacklock, J. W. See Bigger, J. W.
- Blackman, G. E., and Templeman, W. G., interaction of light intensity and nitrogen supply in the growth and metabolism of grasses and clover (*Trifolium repens*). III. Analytical methods for the determination of nitrogen and carbohydrate fractions, III, 362.
- Blackman, M., intensities of electron diffraction rings, I, 62.
- Blackman, N. See Angyal, A.
- Blackwood, B. See Buxton, L. H.
- Blade, E., differential temperature error in weighing, I, 376.
- Blaedel, W. J. See Blacet, F. E.
- Blagney, L. See Fierz-David, H. E.
- Blair, D., hemiplegia associated with sodium diphenylhydantoin in epilepsy, III, 524. See also Gissane, W.
- Blair, E. A., and Erlanger, J., propagation and extension of excitatory effects of nerve action potential across non-responding internodes, III, 109. See also Erlanger, J.
- Blair, G. W. S., and Coppen, F. M. V., differential threshold for compression modulus, III, 120.
- Blair, H. L., and Harley, R. D., midline notching in normal field of vision, III, 398.
- Blair, J. S., constant-temperature control apparatus, utilising a special type of voltage regulator, I, 420.
- Blaissdell, A. C. See Schickltanz, S. T.
- Blake, F. G. See Haviland, J. W.
- Blake, G. G., infra-red radiations and their quenching effect on zinc sulphide phosphors. I and II, I, 57, 196.
- Blacklock, J. H. See Jordan, J. H.
- Blakeslee, A. F., present and potential service of chemistry to plant breeding, III, 172.
- Blalack, A., Levy, S. E., and Cressman, R. D., effects of unilateral renal ischaemia combined with intestinal ischaemia on arterial blood pressure, III, 191.
- Blamey, E. R., and Brand, E., cystinuria in two Scotch terriers, III, 419.
- Blanc-Jean, G. See Roche, J.
- Blanchard, A. A., and Gilmont, P., preparation of cobalt carbonyl, cobalt nitrosyl carbonyl, and cobalt carbonyl hydride by the cyanide method, I, 328.
- Blanchard, J. R., Parke, R. M., and Herzig, A. J., constitution diagrams for iron-carbon-molybdenum alloys, I, 21.
- Blanchard, M. H. See Cohn, E. J.
- Blanchard, R., significance of the iron oxide outcrop at Mount Oxide, Queensland, I, 47.
- Bland, D. E., micro-determination of carbon monoxide in blood; carbon monoxide content of normal blood, III, 562.
- Blandau, R. J. See Boling, J. L.
- Blank, F. See Frey-Wyssling, A.
- Blank, I. H., action of soap on skin, III, 157. pH of skin surface. III. Measurements on arms of children with no apparent skin lesions. IV. Daily variations for adult females with no apparent skin lesions, III, 225. See also Ray, L. F.
- Blankenhorn, M. A., oxygen therapy in pneumonia, III, 105.
- Blankstein, S. S., and Fowler, M. J., visual acuity tests, III, 399.
- Blaricom, L. van, and Gilbert, E. C., dipole moment of aminobenzoic acids in dioxan, I, 10.
- Blaschke, F. See Fricke, R.
- Blaschko, H., amine-oxidase and benz-edrine, III, 447. Amine-oxidase in *Sepia officinalis*, III, 447. and Schlossmann, H., inactivation of adrenaline by phenolases, III, 497.
- Blat, E. I., Gerber, M. I., and Neiman, M. B., conditions of ignition of gaseous mixtures. XIII. Influence of admixture of organic peroxides on formation of cold flames of butane, I, 29.
- Blatherwick, N. R., Bradshaw, P. J., Ewing, M. E., Larson, H. W., and Sawyer, S. D., metabolism of *D*-sorbitol, III, 754.
- Larson, H. W., and Sawyer, S. D., metabolism of *D*-mannoheptulose; excretion after eating avocado, III, 597.
- Blatt, A. H., addition of methoxyamine to $\alpha\beta$ -unsaturated ketones; rearrangement [of the products] to β -methoxyamino-ketones, II, 91.
- Blauch, M. B., and Koch, F. C., application of uricase method to study of changes *in vitro* in uric acid content of mammalian bloods, III, 13. Determination of uric acid in blood with uricase, III, 13.
- Bleckwenn, W. J., Hodgson, E. R., and Herwick, R. P., clinical comparison of picrotoxin, metrazol, and coriamyrtin used as analeptics and as convulsants, III, 681.
- Blekkings, J. J. A., jun. See Cohen, E.
- Bless, A. A. See Byers, W. H.
- Blewett, J. P., properties of oxide-coated cathodes. I, I, 244. Reduction of barium oxide by metals at high temperature, I, 392.
- Bleyer, B., Diemair, W., and Weiss, K., plant phosphatides and lecithin. VI. Phosphatide of rape, III, 83.
- Blickensdorfer, P., and McGuigan, H. A., assay of digitalis, III, 601. Action of digitaloid glucosides on vasomotor centre, III, 923. See also Bone, J. A.
- Blidin, V. P., study of salts by method of microphotometry of X-ray photographs, I, 234.
- Blik, M. S. C. See Niekerk, J. van.
- Blinks, L. R., bioelectric potentials in *Hali-cystis*. VIII. Effects of light, III, 530. and Nielsen, J. P., cell sap of *Hydrodictyon*, III, 691.
- Blinov, N. I., determination of blood groups using serum dried on papers; determining blood group in spots of blood, III, 470.
- Bliss, A. F., effect of trypsin on development of *Rana pipiens*, III, 783.
- Bliss, A. R., jun., *Potentilla anserina* in essential dysmenorrhoea, III, 865. and Glass, H. B., comparative chemistry and pharmacology of menthols, III, 604.
- Bliss, C. I., and Marks, H. P., biological assay of insulin. II. Estimation of drug potency from a graded response, III, 440.
- Bliss, E. A., and Ott, Earl, effect of sulphapyridine, sulphathiazole, and sulphamethylthiazole on severe staphylococcal infection in mice, III, 757. See also Long, P. H.
- Bliss, H. See Miller, H. C., and Robinson, H. M.
- Bloch, E. See Fichter, F., and Sobotka, H.
- Bloch, F. See Alvarez, L. W., and Rist, N.
- Bloch, F. J., vortex-shaped dystrophy of cornea, III, 573.
- Bloch, H. S. See Egloff, G.
- Bloch, K., and Schoenheimer, R., protein metabolism. XI. Metabolic relationship of creatine and creatinine studied with isotopic nitrogen, III, 149. Biological formation of creatine, III, 596. Biological origin of amidine group in creatine, III, 753. Biological demethylation of sarcosine to glycine, III, 859.
- Bloch, L. See Hecht, R.
- Bloch, L. H. Tarnowski, A., and Greene, B. L., pectin and nickel pectinate in acute and chronic bacillary dysentery, III, 61. See also Greene, B. L.
- Bloch, M. A., influence of the chemical bond on K β group of X-ray spectrum of chromium, I, 184.
- Blochintzev, D. I., hydrodynamics of an electronic gas, I, 289.
- Block, F. B., the vagina, III, 307. Endometriosis, III, 660.
- Block, H. W. See Mason, J. P.
- Block, P., jun., conversion of di-iodo-tyrosine into thyroxine, II, 329.
- Block, R. J., determination of histidine, II, 200. Basic amino-acid content of human serum-proteins; effect of ingestion of arginine on composition of serum-proteins, III, 471.
- Jervis, G. A., Bolling, D., and Webb, M., chemical and metabolic studies on phenylalanine. III. Amino-acid content of tissue-proteins of normal and phenylpyruvic oligophrenic individuals; determination of phenylalanine, II, 310. See also Jervis, G. A.
- Block, W. D. See Freyberg, R. H., and Murrill, W. A.
- Blodgett, K. B., Fresnel formulae applied to phenomena of non-reflecting films, I, 313.
- Blom, J. W. See De Haas, W. J.
- Bloom, D. See Rosen, I.
- Bloom, W., and Bartelmez, G. W., haematopoiesis in young human embryos, III, 874.
- Bloomfield, A. L., decrease of gastric secretion with advancing years, III, 218. Coincidence of diabetes mellitus and Addison's disease; effect of cortical extract on glycaemia and glycosuria, III, 409. Psychic gastric secretion in man, III, 740. Dysphagia with disorders of heart and great vessels, III, 906.
- Bloomquist, C. R., and Clark, A., preparation of microscopic glass spheres, I, 176. and Shutt, R. S., fine particle suspensions in organic liquids, I, 357.
- Bloor, W. R., inheritance effect of exercise on phospholipid and cholesterol content of muscle, III, 256. Fat transport in animal body, III, 433.

- Blotner, H., gastric analyses and gastric symptoms in diabetes insipidus, III, 499.
Calcium and phosphorus in cerebrospinal fluid in diabetes insipidus, III, 802.
- Blount, B. K., Openshaw, H. T., and Todd, A. R., *Erythrophleum* alkaloids. I. Erythrophleine, II, 198.
- Blount, R. F., quantitative alteration in renal corpuscles of salamanders through variation in hypophyseal tissue, III, 744.
- Bloxson, A., treatment of tetany of newborn infant with dihydrotachysterol, III, 577.
and Johnston, R. A., calcinosis universalis with unusual features, III, 2.
- Blüh, O., mixed radioactive indicators in physiological experiments, III, 822.
- Blum, H. F., and Gilbert, H. W., photo-dynamic hemolysis with monochromatic light; the reciprocity law, III, 379.
Quantum requirements for hemolysis, III, 379.
- Blumberg, A. See Kutscher, G. W., jun.
- Blumberg, T. T., regeneration of *Euplanaria dorotocephala* with pituitary gland extract, III, 729.
- Blume, W., rare malformation of os sacrum, III, 551.
- Blumenfeld, C., periodic mitotic activity in epidermis of albino rat, III, 280.
and Clausen, F., relationship between adrenal and parathyroid glands, III, 579.
- Blumenfeld, L. See Shookhoff, C.
- Blumenthal, B., and Oppenheimer, E. T., study of ventricular fibrillation, III, 290.
- Blumenthal, H. T., effect of fresh and experimentally modified anterior hypophyses of cattle on mitotic activity in adrenal cortex of guinea-pig, III, 897.
Influence of time of feeding on periodicity in activity in thyroid and adrenal glands of normal male guinea-pigs, III, 897.
Mitotic count in adrenal cortex of normal guinea-pigs, III, 897.
- Blumenthal, R. von. See Vierthaler, R. W.
- Blumenthal, S. See Bass, M. H.
- Blumer, S. See Schopfer, W. H.
- Blumgart, H. L., and Altschule, M. D., should digitalis be administered to patients with pre-existing partial heart block? III, 250.
- Schlesinger, M. J., and Davis, D., relation of clinical manifestations of angina pectoris, coronary thrombosis, and myocardial infarction to pathological findings, III, 631.
- Blumstein, A., Zoll, P. M., and Mayer, J. J., ring test for urine bromides, III, 42.
- Blundell, R., and Graymore, J., cyclic methylenamines. II. Hydrolysis of quaternary compounds and preparation of aliphatic secondary amines, II, 27.
- Blunden, H., Hallman, J. F., Morehouse, M. G., and Deuel, H. J., jun., ketoses. XVIII. Van Slyke procedure for determination of β -hydroxybutyric acid, II, 386.
- Blunn, C. T., age of rats at sexual maturity as determined by their genetic constitution, III, 279.
- Boak, R. A., Carpenter, C. M., and Warren, S. L., thermal inactivation time at 41-5° of 3 strains of herpes simplex virus, III, 456.
See also Fenn, W. O.
- Boas, E. P., and Ellenberg, M., salicylates in rheumatic pericarditis, III, 922.
- Boas, F., age changes and secular changes in anthropometric measurements, III, 554.
- Boatner, C. H., Efron, B. G., and Dorfman, R. I., preparation of purified house dust extracts, III, 775.
See also Champetier, G.
- Bobrov, P. A., and Kolotova, L. A., breakdown products of lignin, II, 18.
- Bocca, A. See Bartolini, B.
- Boeciarelli, D., Galamini, A., and Ligorì, M., phosphorus metabolism. I. Synthesis of phospholipins, phosphoproteins, and nucleoproteins, III, 151.
See also Amaldi, E.
- Bochet, M. See Binet, L.
- Bock, H. B., haemomycelogram, III, 627.
and Felix, K., oxygen consumption of human bone marrow, III, 877.
and Malamos, B., erythropoiesis in case of pernicious anemia, III, 7.
and Weyand, L., anemia in renal disease. I. Fate of red cells in renal and essential hypertension, III, 7.
- Bockemüller, W., and Geier, R., stereoisomeric fuchsones, II, 93.
and Janssen, R., action of bromine on olefines, II, 73.
- Bockhorn, K., treatment of obesity with thyroxine, III, 303.
- Bockus, H. L. See Johnson, T. A.
- Bodansky, A., non-osseous origins of serum-phosphatase, III, 379.
- Bodansky, M. See Levine, H.
- Bodansky, O. See Bakwin, H.
- Bodel, J. K., condylo-diaphysial angle of humerus, III, 87.
- Bodenstein, M., photochemical sensitization, I, 367.
[with Falkenberg, W.], equilibria in the reaction $\text{ZNO} + \text{CO} \rightleftharpoons \text{Zn}_{\text{vapour}} + \text{CO}_2$. I, 1, 322.
- Boder, E. See Reiss, O.
- Bodian, D., diencephalon of opossum. II. Fibre connexions, III, 717.
and Howe, H. A., effective method of intraneural inoculation of poliomyelitis virus, III, 721.
See also Howe, H. A., and Moore, C. R.
- Bodine, J. H., Ray, O. M., Allen, T. H., and Carlson, L. D., enzymes in ontogenesis. VIII. Changes in natural activators of protyrosinase during development, III, 179.
See also Allen, T. H., and Carlson, L. D.
- Bodnár, J., Szép, O., and Weszprémy, B., natural mercury content of the human organism, III, 139.
and Török, T., photometric determination of silicic acid in biological substances, III, 370.
- Bodroux, D., and Chatenet, A., *p*-cyclohexylphenoxycetic acid and its derivatives, II, 171.
- Bodrova, N. V., action of lachnophyline on perfused frog's heart, III, 862.
- Böcker, H., reduction of breakdown potential at high frequency, I, 399.
- Böeseken, J., and Furnée, J. M., action of pentols (pentanepentaols) on electrical conductivity of boric acid [solutions], I, 164.
- Böhm, B., and Klemm, W., behaviour of the alkali metals to one another, I, 106.
- Böhm, F., mechanism of formation of indoxyl *in vivo* from *o*-nitrobenzene derivatives, III, 519.
- Böhme, H., monohydroxycoumarins, II, 139.
Constitution of calameon, II, 284.
- Boeke, J., and Suchtelen, H. van, direct rapid chemical analysis with the dropping mercury electrode, I, 133.
- Boell, E. J., Koch, H., and Needham, J., morphogenesis and metabolism: studies with the Cartesian diver ultramicromanometer. IV. Respiratory quotient of regions of amphibian gastrula, III, 55.
and Needham, J., morphogenesis and metabolism; studies with the Cartesian diver ultramicromanometer. II. Effect of dinitro-*o*-cresol on anaerobic glycolysis of regions of amphibian gastrula. III. Respiratory rate of regions of amphibian gastrula, III, 55.
- Needham, J., and Rogers, V., morphogenesis and metabolism: studies with the Cartesian diver ultramicromanometer. I. Anaerobic glycolysis of regions of amphibian gastrula, III, 55.
- Boelter, M. D. D. See Kleiber, M.
- Boeminghaus, H., hormonal therapy of hypertrophy of prostate gland, III, 308.
- Boerger, E. See Roth, W. A.
- Boerlage, (Miss) L. See Aten, A. H. W.
- Boerner, F., Johnson, T. A., and Gianniny, M., significance of presence of calcium bilirubin pigment and cholesterol crystals in faeces, III, 39.
and Lukens, M., sensitivity and specificity of simplified complement fixation test for syphilis, III, 689.
See also Flosdorf, E. W.
- Boese, A. B., diketene: a new industrial chemical, II, 65.
- Böttcher, C. J. F., dielectric constants of dipole liquids, I, 58.
- Boezaard, A. G. J. See Kluyver, A. J.
- Bogaert, A. van, and Baarle, F. van, gonadotropic hormone in cerebrospinal fluid in experimental hypertension, III, 565.
- Bogaert, L. van, antagonism between hyperthyroidism and myasthenia gravis, III, 888.
- Bogan, I. K., hands and wrists of diabetic child, III, 732.
- Bogart, H. N., and Davis, D. S., specific gravity-temperature relationships for alum solutions, I, 66.
- Bogart, R., Sporling, G., Barnes, L. L., and Asdell, S. A., influence of reproductive condition on growth in female rat, III, 739.
See also Babcock, M. J.
- Bogdan, H., condensation of acenaphthenequinone with monohydric phenols; cyclic pinacones and products of reduction and of auto-oxidation, II, 93.
- Bogdan, L. See Cirlea, J.
- Bogdan, P., new applications of the parachor, I, 61.
Molecular polarisation and the capillary constant, I, 150.
- Bogdanov, S. G., and Krasikov, S. E., potentiometric titration of quinol, *p*-aminophenol, and *p*-methylaminophenol with complex chlorides of quadrivalent iridium, II, 242.
- Bogdanov, S. V., sulphonation with sulphites. IV. Oxidation of sodium sulphite in presence of β -naphtholsulphonic acids, II, 14.
[with Novoschilova, O. J.], sulphonation by means of sulphites. V. Formation of β -naphtholsulphonic acids, II, 169.
- Bogert, F. van der, avitaminosis without dietetic deficiency, III, 320.

- Bogert, M. T. See Cassaday, J. T., Mills, E. J., jun., and Orcutt, R. M.
- Bogert, V. See Ritter, J. R.
- Bogetti, H., weight of liver after partial hepatectomy in white rat, III, 311.
- and Mazzocco, P., fat, nitrogen, and water in liver and muscle after partial hepatectomy in white rat, III, 311.
- See also Royer, M.
- Bogiteh, B., deposits of oxidised nickel minerals in the Urals, I, 46.
- Bogoljubova, L. A. See Naumov, S. N.
- Bogomoletz, A., protein compatibility of blood in transfusion, III, 789. Stimulating action of cytotoxic antireticular serum on connective tissue, III, 816.
- Bograchov, E. See Weizmann, M.
- Bohls, S. W. See Irons, J. V., and Murphy, J. N.
- Bohn, G., and Drzewina, A., effect of vital dyes on changes in form and in skeleton of echinoderm larvae, III, 465.
- Bohn, H., and Basler, R., indole intoxication and creatine metabolism in chronic enteritis, III, 596.
- Bohn, J. L., and Morgan, J., experiments and theory on performance of the Geiger point counter, I, 382.
- Bohning, A., Katz, L. N., Robinow, M., and Gertz, G., value and significance of multiple chest leads in man, III, 98.
- Bohr, D. F., and Bean, J. W., oxygen poisoning in cardiac tissue, III, 106.
- Bohr, N., and Wheeler, J. A., fission of protactinium, I, 53.
- See also Aston, F. W.
- Bohstedt, G. See Hart, E. B.
- Boi, F., staphylococci of mammary infections of the goat and sheep, III, 688.
- Boisson, R., determination of lactic and pyruvic acid with periodic acid, II, 264.
- See also Fleury, P.
- Boissonnas, C. G., and Meyer, K. H., osmotic pressure and state of the solvent in the system acetone-cellulose nitrate, I, 113.
- See also Meyer, K. H.
- Boit, H. G. See Leuchs, H.
- Boivin, A., existence of a non-protein somatic antigen common to the smooth and rough varieties of *Salmonella*, III, 77. Comparative action of the two toxins of *Bact. shiga* on different species of animals, III, 453.
- and Delaunay, A., presence of variants of Shiga's bacillus containing different quantities of the sugar-lipin antigen and neurotoxin, III, 265. Comparative behaviour of the two toxins of Shiga's bacillus towards the corresponding antibodies, III, 541.
- and Richou, R., preparation of anti-typhoparatyphoid serum, III, 267.
- Bojinescu, A., electron-diffraction in thin silver and gold films prepared by cathodic sputtering on crystalline supports, I, 199.
- Bok, S. T., cephalisation and boundary values of brain- and body-sizes in mammals, III, 179. Exponent for expression of different manifestations of cortical cytoarchitectonic fields, III, 393.
- and Kip, M. J. T., size of body and size and number of nerve cells in cerebral cortex, III, 719.
- Boke, N. H., Delafeld's hæmatoxylin and safranine for staining meristematic tissues, III, 374.
- Boki, G. B. See Kurnakov, N. N.
- Bokil, K. V., and Nargund, K. S., chaulmoogric acid series. II. Synthesis of Δ^2 -cyclopentenecarboxylic acid, II, 308.
- See also Dalal, G. A., Savkar, G. S., and Vyas, V. A.
- Bolam, T. R., and Bowden, G., action of immiscible organic liquids on aqueous dispersions, I, 112.
- Boland, E. W., relief of [cardiac] pain by oxygen, III, 708.
- See also Smith, H. L.
- Bolcato, V., and Tono, P., production of C_2 and C_4 compounds in citric fermentation of sugar by *Aspergillus niger*, III, 166. Lactic acid-mannitol fermentation, III, 540.
- Boldrey, E. See Penfield, W.
- Boles, R. S., Riggs, H. E., and Griffiths, J. O., rôle of circulation in production of peptic ulcer, III, 310.
- Boling, J. L., Blandau, R. J., Wilson, James G., and Young, W. C., post-parturitional heat-responses of newborn and adult guinea-pigs, III, 213.
- Bolliger, A., volumetric determination of acridines by methylene-blue, II, 264.
- and Carrodus, A., ambisexual action of progesterone as observed in common Australian opossum, III, 130. Experimental testicular ascent as produced in marsupial *Trichosurus vulpecula*, III, 647. Effect of oestrogens on pouch of marsupial *Trichosurus vulpecula*, III, 652, 810.
- and Reuter, F., reaction of 3:5-dinitrobenzoic acid with alkali. II. The main product of the reaction, 3:3'-dinitroazoxybenzene-5:5'-dicarboxylic acid, II, 88.
- See also Carrodus, A.
- Bolling, D. See Block, R. J., and Jervis, G. A.
- Bollman, J. L. See Butt, H. R., Coffey, R. J., and Helmholtz, H. F.
- Bolman, J., green zircon, I, 46.
- Bolognesi, G., and Brugi, G., [histology of] experimental hyperplasia of interstitial tissue of testes, III, 848.
- Bolomey, P., glutathione and alcoholic fermentation. II. Glutathione and inhibition of alcoholic fermentation by monohalogenoacetic acids, III, 73.
- Bolt, F. See Strauss, L. H.
- Boman-Behram, A. K. See Dhurandhar, C. B.
- Bombelli, A. A., decomposition of mercuric ferrocyanide, I, 125.
- Bomford, R. R. See Hunter, D.
- Bommer, E. A. See Rienäcker, G.
- Bommer, H., crystal structure and magnetic behaviour of metallic holmium, I, 12.
- Bomskov, C., biological standardisation and action of vitamin-E, III, 236. Biological assay of vitamin-A, III, 321.
- Bon, F., surface tension between polarised mercury and an aqueous solution of sulphuric acid, I, 253.
- Bonamour, G. See Bonnet, P.
- Bonanto, M. V. See Freund, J.
- Bonar, B. E. See Fenning, C.
- Boncoddo, N. F. See Thannhauser, S. J.
- Bond, E. D., psychiatric contributions to study of gastro-intestinal system, III, 34.
- Bond, G., utilisation of carbohydrates in leguminous symbiosis, III, 173.
- and Boyes, J., excretion of nitrogenous substances from root nodules; observations on various leguminous plants, III, 80.
- Bondarenko, A. V. See Nekrassov, N. I.
- Bonde, R., bacteria associated with potato blackleg and seed-piece decay, III, 353.
- Bondi, A., jun. See Spaulding, E. H.
- Bone, J. A., and Elam, J. W., action of tincture of iodine injected into pericardium, III, 293.
- Elam, J. W., and Blickensdorfer, P., cat and dog units of digitalis, III, 601.
- Bonet-Maury, P., and Olivier, H. R., effect of irradiating tubercle bacillus with radon, III, 170.
- Bonhoeffer, K. F., enzyme reactions in heavy water, III, 70.
- See also Hochberg, J.
- Bonin, W., origin of nervus terminalis ganglion in *Amia calva*, III, 372.
- Bonino, G. B., Raman and infra-red spectra and the molecular constitution of pyrrole, thiophen, and furan, I, 146. Modern development of the concept of co-ordination. I. Introduction, I, 198.
- Bonisteel, W. J., polyploidy in relation to chemical analysis, III, 929.
- Bonivento, E. See Morin, F.
- Bonnar, W., sulphapyridine in human anthrax, III, 521.
- Bonne, C., and Sandground, J. H., production of gastric tumours, bordering on malignancy, in Javanese monkeys through agency of *Nochitia nochti*, a parasitic nematode, III, 45.
- Bonnell, W. S., Byman, L., and Keyes, D. B., surface tension of ethyl alcohol-water mixtures, I, 252.
- Bonner, D. M., relation of environment and of physical properties of synthetic growth-substances to the growth reaction, III, 174.
- and Bonner, J., influence of various growth factors on growth of green plants, III, 871.
- Bonner, J., and Devirian, P. S., growth-factor requirements of four species of isolated roots, III, 459.
- and Greene, J., vitamin- B_1 and growth of green plants, III, 174.
- and Koepfli, J. B., inhibition of root growth by auxins, III, 460.
- See also Bonner, D. M., Buchman, E. R., and English, J., jun.
- Bonner, J. F. See Manly, R. S.
- Bonner, L. G. See Kirby-Smith, J. S., and Sporer, H.
- Bonner, T. W., neutrons from disintegration of fluorine by deuterons, I, 186.
- and Hudspeth, E., anomalous scattering of neutrons by helium, I, 338.
- Hudspeth, E., and Bennett, W. E., resonances in the emission from the reaction $^{12}\text{C} + ^2\text{H}$ of neutrons, I, 383.
- Hudspeth, E., Bennett, W. E., and Rogers, M. M., resonances in the emission from the reaction $^{12}\text{C} + ^2\text{H}$ of protons, I, 383.
- See also Bennett, W. E.
- Bonner, W. D., and Williams, M. B., azeotropic system ethyl alcohol-water-benzene, I, 257.
- Bonnet, P., Ponthus, P., Bonamour, G., and Niel, R., detection of gold in the rabbit cornea, III, 203.
- Bonot, A., determination of organic iodine by the micro-method of Leipert, II, 264. Iodinated serum-albumin precipitin reaction; non-precipitable fraction of antibody system, III, 545.

- Bonser, G. M., inbred mice and mammary cancer, III, 423. Induction of tumours by injected methylcholanthrene in mice of strain especially sensitive to carcinogenic agents applied to skin, III, 505.
- and Robson, J. M., effects of prolonged oestrogen administration on male mice of various strains: development of testicular tumours in Strong A strain, III, 736.
- and Wainman, L. M., effect of diet supplemented by fresh liver on induced skin tumours in inbred mice, III, 669.
- Bonsignore, A., and Morando, G. C., effect of adrenaline on the nictitating membrane, III, 728.
- Bonsnes, R. W., and White, A., fractionation of saline extracts of anterior pituitary, III, 730.
- Bonteux, Y. See Mosinger, M.
- Bonvallet, M., and Le Beau, J., experimental oedema of brain, III, 200.
- Booe, S., nutritive value of papain-mutton broth, III, 142.
- Booher, L. E., adequate nutrition for the industrial worker, III, 425.
- and Callison, E. C., minimum vitamin-A requirements of normal adults. II. Utilisation of carotene as affected by dietary factors and variations in light exposure, III, 143.
- Book, M. H., and Sullivan, M. W., sealing of museum jars, III, 89.
- Boone, B. R., amplifier for recording heart sounds through use of the cathode-ray tube, III, 99.
- Boorman, E. J., determination of ethyl alcohol in presence of methyl alcohol, isopropyl alcohol, and acetone, II, 31.
- Boorsma, H. J., Prévot, A. R., and Veillon, R., fermentation of glucose by *Plectridium tetani*, III, 266.
- See also Berthelot, A., and Prévot, A. R.
- Boos, M. F., and Aberdeen, E., granites of the Front Range, Colorado: the Indian Creek plutons, I, 397.
- Booth, E. T., Dunning, J. R., Grosse, A. V., and Nier, A. O., neutron capture by uranium 238, I, 426.
- See also Grosse, A. V., Kingdon, K. H., and Nier, A. O.
- Booth, F., and Wilson, A. H., radiative processes involving fast mesons, I, 385.
- See also Wilson, A. H.
- Booth, H. S., and Cassidy, (Miss) M. C., fluorination of thiophosphoryl trichloride; thiophosphoryl chlorofluorides, I, 418.
- and Mericola, F. C., fluorination of thionyl chloride, I, 229.
- and Seegmiller, C. G., phosphoryl bromofluorides, I, 36.
- Booth, R. G., thiochrome method for estimation of aneurin; survey of aneurin content of wheats, III, 857.
- See also Moran, T.
- Boothby, W. M., and Lovelace, W. R., oxygen in aviation, III, 635.
- Lovelace, W. R., jun., and Vihlein, A., B.L.B. oxygen inhalation apparatus, III, 794.
- Mayo, C. W., and Lovelace, W. R., 100% oxygen, III, 18.
- See also Cusick, P. L., and Dublin, W. B.
- Boquet, A., virulence of the tubercle bacillus, III, 170.
- and Lenci, E., content of Koch's bacillus in tuberculous material, III, 613.
- Boquet, P., rôle of minute quantities of copper in the attenuation of cobra (*Naja tripudians*) venom by hydrogen peroxide, III, 226. Attenuation of ricin by hydrogen peroxide in presence of traces of copper, III, 336.
- See also Césari, E.
- Bor, J., Hobson, A., and Wood, C., application of new photo-electric method to the determination of the optical constants of pure metals, I, 63. Optical constants of copper-nickel alloys, I, 66.
- Borakso, C. I., Grudkova, L. I., and Mischtschenko, K. P., certain physico-chemical properties of moist salts of strong electrolytes, determined by measuring the dielectric constant and the conductivity, I, 27.
- Borbolla, R., types of tooth mutilation found in Mexico, III, 700.
- Borchert, W., and Fischbeck, K., high-temperature camera for Debye-Scherrer photographs, I, 234.
- Bordley, J. See Eichna, L. W.
- Borei, H., action of fluoride on cytochrome and cytochrome oxidase, III, 866.
- Effect of carbon monoxide on fermentation, III, 867.
- See also Runnström, J.
- Borgatti, G., effect of organ extracts on muscle chronaxie. I and II, III, 390.
- Excitability of muscle after castration, III, 843.
- Borghese, E., lymphatic system of reptiles. I. Lymph vessels of *Ophisaurus apus*, III, 177. Paravertebral lymph vessels of Ophidia, III, 712.
- Borghs, J., and Itterbeek, A. van, adsorption of gases on copper at liquid oxygen and liquid hydrogen temperatures and at low pressures, I, 109.
- See also Itterbeek, A. van.
- Borjani, A., pigeon method of assay of *Digitalis lutea*, III, 62. Pharmacology of strontium. V. Direct effect on bulbar and cortical centres, III, 64.
- Boring, E. G. See Holway, A. H.
- Borisov, M. D., Brailovski, V. P., and Leipunski, A. I., scattering of fast electrons by nitrogen nuclei, I, 277.
- Borisov-Pototzki, S. A., tetra-aminodisulphitoplatinum, I, 267.
- Borisova, L. M. See Kotscheschkov, K. A.
- Bork, A., catalyst poisoning from the point of view of the specificity of active centres. XI. Relative adsorption coefficients of hydrogen in alcohol dehydrogenation on copper, I, 78.
- Bork-Felkamp, A. J. van, brain of Kenya natives, III, 625.
- Borkon, E. L. See Templeton, R. D.
- Borman, E. K. See Stuart, C. A.
- Born, H. J. See Zimmer, K. G.
- Born, M., stability of crystal lattices, I, 288. Relation between breaking and melting, I, 288.
- and Fuchs, K., mass centre in relativity, I, 280, 343.
- Borneman-Starinkevitch, I. D., decomposition of cassiterite by fusion with borax and its chemical analysis, I, 39.
- Boroff, D. A., specific aggregation of streptococcal toxins adsorbed on oil droplets, III, 612.
- Borovik, S. A., and Prokopenko, N. M., distribution of indium in Kazakhstan, I, 181.
- Prokopenko, N. M., and Pokrovskaja, T. L., distribution of indium in rocks, I, 274.
- Borozdina, A. See Schmutz, A.
- Borries, B. von, and Kausehe, G. A., hyper-microscopic determination of shape and size distribution of gold colloids, I, 210.
- and Ruska, E., resolving power of super-microscope, I, 82.
- Borrow, A. See Thenebe, C. L.
- Bors, G. See Maxim, M.
- Borsche, W., and Klein, A., 2,3-diphenyl- Δ^2 -cyclopentenone, II, 133.
- and Schmidt, Helmut, Friedel-Crafts syntheses with tricarballic chloride and α -phenyltricarballic chloride, II, 91.
- and Scriba, W., isobenzoxazoles. III, II, 57.
- Borsetto, P., effect of colchicine on blood, III, 155.
- Borson, H. J., and Mether, S. R., relief of hypochromic anemia in dogs with synthetic vitamin-B₆: influence of "filtrate factors," III, 703.
- Borsook, H., oxidation-reduction potential of co-enzyme. I, I, 324.
- Buchman, E. R., Hatcher, J. B., Yost, D. M., and McMillan, E., aneurin metabolism in man indicated by use of radioactive sulphur, III, 914.
- Dougherty, P., Gould, A. A., and Kremers, E. D., vitamin-B complex and functional chronic gastro-intestinal malfunction, III, 34.
- and Dubnoff, J. W., specific enzyme deaminising free and combined adenylic acid, III, 162. Submicro-determination of total nitrogen, ammonia, amino-nitrogen, amides, peptides, adenylic acid, and nitrates, III, 176. Formation of creatine from glycoeyamine in the liver, III, 311. Creatine production in liver and kidney, III, 812. Synthesis of glycoeyamine (guanidinoacetic acid) in rat kidney and mechanism of creatine synthesis *in vivo*, III, 821.
- Kremers, M. Y., and Wiggins, C. G., vitamin-B₆ for tic douloureux, III, 718.
- See also Huffmann, J. W.
- Borst, L. B., and Harkins, W. D., search for a neutron-deuteron reaction, I, 277.
- Bortels, H., effect of molybdenum and vanadium on legumes, III, 457.
- Borzjak, P. G., and Kovalenko, J. I., electron counter with an aluminium cathode, I, 331.
- Bos, H. G., when is a substance oxidised or reduced to another substance? I, 263.
- Bos, J. G. See Lifschitz, I.
- Bos, L. H. See Huffmann, J. W.
- Bosazza, V. L., occurrence of wax-like substances in peaty fireclay, I, 48. Refractive index liquids, I, 301. Specific gravities of clays, I, 397. Adsorption of malachite-green by clays and allied minerals, I, 409.
- Bosch, F. de A., [determination of] phosphorus in seeds. I, III, 694.
- Bosch, W. C., and Brown, B. B., wide-range intensity measurements in photo-electric spectrophotometry, I, 175.
- Bose, D. M., origin of colour in paramagnetic salts and solutions, I, 242.
- and Chowdhry, (Miss) B., photographic plates as detectors of mesotron showers, I, 341.
- Boshko, N. P., cracking of methane in the electric arc at low pressures. II, I, 262.
- Bosis, R. B. See Kratinova, K. R.
- Bossányi, I. See Kiss, A. von.
- Bosson, G. See under Duchateau-Bosson, G.

- Bost, R. W., and Everett, J. E., sulphur. XVI. Synthesis of higher alkyl sulphonium salts and related compounds, II, 296.
- and Kyker, G. C., preparation and properties of 6-halogenoacrylamines from *p*-cymene, II, 214.
- See also Latimer, P. H.
- Bostick, W. H. See Herzog, G.
- Boston, F. K., convulsions after vinesthene, III, 863. Ether convulsions, III, 925.
- Bostrom, K. J., Koch, J., and Lauritsen, T., delayed neutron emission accompanying uranium fission, I, 53.
- Boström, N. See Hedvall, J. A.
- Boswell, J. G., and Whiting, G. C., oxidase systems in tissues of higher plants, III, 871. Anaerobic respiration of potato tubers, III, 941.
- Bosworth, R. C. L., adsorption of acetic acid by mercury, I, 68. Surface tension of mercury by the maximum bubble pressure method, I, 68. Effect of carbon dioxide on surface tension of mercury, I, 69.
- Bothe, W., narrow cosmic-ray showers, I, 190.
- Bottger, G. T., nutritive requirements of the European maize borer, III, 944.
- Botti, E., adsorptive action of active carbon for the salts of rare earths, I, 208.
- See also Mazza, L., and Piccardi, G.
- Bottin, J., duodenal and biliary reflux in necrosis of pancreas, III, 133.
- Bottini, O., corrosive effect of rain in the region of Vesuvius, I, 43.
- Bottomley, A. C., and Folley, S. J., inactivation of prolactin by treatment with phenyl isocyanate, III, 495.
- Folley, S. J., Walker, F. H. A., and Scott-Watson, H. M., effect of subcutaneous implantation of adrenaline tablets on blood-sugar and milk composition in lactating ruminants, III, 643.
- See also Folley, S. J.
- Botvinnik, M. M. See Prokofiev, M. A.
- Boncharlat, M. See Policard, A.
- Bouchet, M. See Julien, A.
- Bouckaert, J. J. See Grimson, K. S., and Heymans, C.
- Bouckaert, J. P. See De Nayer, P. P.
- Boughton, I. B., and Hardy, W. T., toxicity of coffee bean (*Sesbania vesicaria*) for sheep, III, 253.
- Bouillenne, R., and Bouillenne-Walrand, M., auxin content of plantules and dormant hypocotyls of *Impatiens balsamina*, L., in relation to root production, III, 693.
- Bouillenne-Walrand, M. See Bouillenne, R.
- Bouilloux, G., micro-detection and micro-determination of silver and mercury, I, 269.
- Boulanger, P. See Polonovski, M.
- Bould, C., nutrition of tulips and narcissi, III, 361.
- Bouman, H. D., development of tonal sensation, III, 118, 492.
- See also Rijnberk, G. van.
- Bouman, J. See De Jong, W. F.
- Bounoure, L., origin of reproductive cells and problem of germinal lineage, III, 696. Germinal continuity and agamic reproduction, III, 780.
- Bourdillon, J., osmotic pressure study of protein fractions [in serum] in normal and in nephrotic subjects, III, 187.
- Bourdillon, R. B., vaginal potentials in rabbits, III, 212.
- Bourdillon, R. B., and Lidwell, O. M., slow vaginal potentials, III, 905.
- Bourland, J. F. See Ewell, R. H.
- Bourne, M. C. See Kerly, M.
- Bournique, R. A. See MacNeven, W. M.
- Boutaric, A., absorption and diffusion of light by turbid media, I, 57. Gibbs' relation and adsorption formulae, I, 252. Variation in composition of intermicellar liquid during ultrafiltration of a colloidal solution, I, 254.
- and Berthier, P., change of surface tension of aqueous solutions of serum containing methylene-blue as function of time, III, 685.
- Berthier, P., and Roy, M., physico-chemical properties of solutions of bile, III, 606.
- and Roy, M., inhibitory influence of serum-proteins on the alteration of bilirubin in alkaline solution, III, 312.
- Bouwer, W. F., inhibition of wiping off-reflex in frogs by distension of cloaca, III, 392.
- Bouwens, A., behaviour of slow neutrons in water and paraffin, I, 186.
- Boventer, K., quick micro-reaction for cerebrospinal fluid in syphilis, III, 169.
- Bovet, D. See Meunier, P.
- Bowcock, H., mitotic leukoblasts in peripheral blood in infectious mononucleosis, III, 183.
- Bowden, E., and Adkins, H., synthesis of γ -4-hydroxycyclohexyl-*n*-propyl alcohol, a product of the hydrogenation of lignin, II, 371.
- Bowden, G. See Bolam, T. R.
- Bowden, S. T., free radicals and radical stability. IX. Influence of short-lived and long-lived radicals on the reactivity of alcohols, II, 306.
- and Clarke, D. L., free radicals and radical stability. X. Influence of methyl group on stability of triphenylmethyl, II, 302.
- Clarke, D. L., and Harris, W. E., free radicals and radical stability. VIII. Stability of formates and reduction of triarylcannabinols, II, 307.
- and John, T., free radicals and radical stability. VII. Influence of the phenoxyl group on stability of ketyllic derivatives; preparation of carbon monoxide from carbonates, II, 126.
- and Morgan, A. R., temperature variation of viscosity of non-polar and dipolar inorganic liquids, I, 249.
- and Thomas, T. L., free radicals and radical stability. XI. Methyltriphenylmethylys, II, 372.
- and Watkins, T. F., addition of magnesium iodide to camphor and terpene derivatives, II, 49. Action of formic acid on triphenylmethyl ethyl ether and on triphenylmethyl chloride, II, 344. Free radicals and radical stability. XII. Fluorotriphenylmethyl and the reactivity of halogen substituents in free radicals, II, 372.
- See also Clarke, D. L., John, T., and Morgan, A. R.
- Bowditch, M., and Elkins, H. B., chronic exposure to benzene. I. Industrial aspects, III, 68.
- Bowen, D. M. See Fieser, L. F.
- Bower, A. G. See Mitchell, W. J.
- Bower, C. See Corper, H. J.
- Bower, J. C., and Burcham, W. E., transmutation of fluorine by deuterons, I, 141.
- Bowers, R. V., Outhouse, E. L., and Forbes, J. C., phosphatase; hydrolysis of aminoethyl phosphate and β -glycerophosphate by faecal and kidney phosphatase, III, 349.
- Bowers, W. C., chemotherapy in acute otitis media, III, 921.
- Bowes, R. K. See Bishop, P. M. F.
- Bowie, D. T., distribution of chief or pepsin-forming cells in gastric mucosa of cat, III, 876.
- Bowie, R. M., ionisation gauge circuit, I, 420.
- See also Morse, R. S.
- Bowling, J. D. See Steinberg, R. A.
- Bowman, D. W. See Green, J. B.
- Bowman, K. M., Wortis, J., Orenstein, L. L., and Goldfarb, W., sugar tolerance of alcoholic patients, III, 239.
- See also Himwich, H. E., and Jolliffe, N.
- Bowman, W. E. See McCullagh, D. R.
- Bowman, W. H. See Ardagh, E. G. R.
- Boy, G. See Terroine, E. F.
- Boyce, F. F. See Leidenheimer, H., jun.
- Boycott, M. See Bishop, P. M. F.
- Boyd, D. A. See Malamud, N.
- Boyd, E. See Harkins, W. D.
- Boyd, E. M., separation of lipins in gravimetric acetone method for plasma-total protein, III, 96.
- and Clark, K. J., prolongation by zinc salts of water balance reaction of posterior hypophyseal extract, III, 406.
- Clark, K. J., and Smith, A. E., effect of sedatives, narcotics, and anaesthetics on changes in body-water of frogs produced by pituitrin, III, 154.
- and Clarke, E. L., inter-relation of lipins in blood plasma of White Leghorn cockerels, III, 472.
- and Gibson, J. D., anterior pituitary extracts and Brunn reaction in frogs, III, 730.
- and Johnston, G. M., seasonal variation in water content of the respiratory tract, III, 294.
- and Mack, E. G., relation between amphibian water retention principle and oxytocic activity of pituitary extracts, III, 207. Assay of pituitary water retention principle, III, 406.
- Mack, E. G., and Smith, A. E., seasonal variation in response of frog body water to pituitrin, III, 302.
- and Young, F. M., posterior pituitary dosage and Brunn reaction in frogs, III, 641. Optical stimuli and water balance in frogs, III, 722.
- See also Clarke, E. L., and Connell, W. F.
- Boyd, G. R., jun. See Yoe, J. H.
- Boyd, J., benzedrine sulphate and avertin, III, 863.
- Boyd, J. D. See Jackson, R. L.
- Boyd, J. S. K., laboratory diagnosis of bacillary dysentery, III, 612.
- Boyd, L. G., and Boyd, W. C., blood group reactions of preserved bone and muscle, III, 279.
- Boyd, L. J., and Scherf, D., bundle-branch block and monophasic electro-cardiogram, III, 289.
- Boyd, R. N., and Wakeham, H. R. R., effect of temperature on structure of mercury, I, 12.
- See also Hildebrand, J. H.
- Boyd, T. E., and Maaske, C. A., vagal inhibition of inspiration, and accompanying changes of respiratory rhythm, III, 194.
- Boyd, W. C. See Birdsell, J. B., and Boyd, L. G.

- Boyd, W. L. See Petersen, W. E.
- Boyden, E. A. See Kreilkamp, B. L., and Layne, J. A.
- Boyer, N. H., Eckstein, R. W., and Wiggers, C. J., characteristics of normal heart sounds recorded by direct methods, III, 631.
- Boyes, J. See Bond, G.
- Boyes, J. W. See Peto, F. H.
- Boyland, E., British Empire cancer campaign, III, 425. Metabolism of tumours, III, 508.
- and Boyland, M. E., tissue metabolism. XII. Action of colchicine on transplanted, induced, and spontaneous mouse tumours, III, 508.
- See also Chibnall, A. C.
- Boyland, M. E. See Boyland, E.
- Boyle, H. H. See Aldrich, C. A.
- Boyle, J. L., Cumming, W. M., and Steven, A. B., metallic complexes of *o*-substituted azo-dyes, II, 214.
- Boyle, P. E., Bessey, O. A., and Howe, P. R., rate of dentine formation in incisor teeth of guinea-pigs on normal and on ascorbic acid-deficient diets, III, 820.
- Boyle, P. J. See Conway, E. J.
- Boyle, R. W., McDonald, C. H., and De Groat, A. F., effect of diphtheria toxin on the heart, III, 291.
- Boyle, W. See Singh, B. N.
- Bozeman, M. L. See Metz, C. W.
- Bozicevich, J., and Detre, L., antigenic phase of trichinosis, III, 774.
- See also Wright, W. H.
- Bozler, E., electrophysiological studies on motility of gastro-intestinal tract, III, 218.
- Bozorth, R. M. See Williams, H. J.
- Bozzin, M. See McIntyre, G. H.
- Braasch, W. F., Walters, W., and Hammer, H. T., hypertension and surgical kidney, III, 793.
- Brabant, H., elimination of bismuth by kidney and salivary glands, III, 442.
- Bracaloni, L., *l*-tyrosine in alcoholic extract of egg yolk, III, 700.
- Bracciosi, M. A., effect of methyl *p*-hydroxybenzoate on tubercle bacilli, III, 77.
- Bracher, G. See Osgood, E. E.
- Brachet, J., metabolism of egg of *Rana fusca*. V. Protein and carbohydrate metabolism in relation to organiser problem, III, 279. Histochemical detection of pentose-nucleic acids, III, 369. Histochemical study of proteins in development of fish, amphibia, and birds, III, 553. Localisation of pentose-nucleic acids during development of amphibia, III, 640. Localisation of thymonucleic acid during oögenesis and maturation in amphibia, III, 835.
- and Rapkine, L., effect of oxidation and reduction on dorsal and ventral explants from amphibian gastrulas, III, 3.
- Brack, C. B., and Gray, L. A., effect of anterior pituitary-like sex hormone and of castration on experimental tuberculosis, III, 850.
- See also Langworthy, O. R.
- Bracken, M. M., prognostic significance of eosinophils in blood in pneumonia, III, 183.
- Johnston, J. M., Crum, G. E., Patrick, D. R., Permar, H. H., and MacLachlan, W. W. G., experimental studies in chemotherapy of pneumococcal infections, including hydroxyethylapocupreine, sulphapyridine, and other related chemical compounds, III, 437.
- Brackett, F. S. See Armstrong, D. W., and Hollaender, A.
- Bradbrook, E. F. See Barrett, P. A.
- Bradbury, F. R., and Edwards, E. G., volumetric determination of ferric iron, I, 329.
- Bradbury, J. T. See Wile, U. J.
- Bradbury, N. E., ionisation, negative ion formation, and recombination in the ionosphere, I, 309. Ionic recombination in gases, I, 414.
- Braddick, H. J. J., and Hensby, G. S., evidence for occurrence of meson pairs, I, 91.
- Braden, S., and Kahn, E. A., surgical treatment of hypertension, III, 103.
- Bradford, W. L., and Wold, M., effect of hyperimmune human serum (lyophile) and sulphapyridine on experimental murine pertussis, III, 758.
- See also Katsampes, C. McGuinness, A. C., and Scherp, H. W.
- Bradlaw, R., histology and histopathology of the dental innervation, III, 374.
- Bradley, A. J., X-ray evidence of intermediate stages during precipitation from solid solution, I, 251.
- Bragg, (Sir) W. L., and Sykes, C., structure of alloys, I, 438.
- Bradley, A. S., and Taylor, A., X-ray investigation of aluminium-rich iron-nickel-aluminium alloys after slow cooling, I, 318.
- Bradley, C. F. See Murray, M. R.
- Bradley, R. S., surface reaction between oxonium ions and mica, I, 69. Influence of interfacial curvature on solubility, I, 159. Measurement of linear tension at the boundary liquid-liquid-air, I, 409.
- Bradley, W. F., structural scheme of attapulgite, I, 380.
- See also Grim, R. E.
- Bradshaw, P. J. See Blatherwick, N. R.
- Bradsher, C. K., phenanthrene derivatives. IV. 9:10-cyclo-Penteno- and -hexenophenanthrene, II, 11. New route to 9-alkyl- and 9-aryl-anthracenes, II, 161. 9- and 10-Methyl-1:2-benzanthracene, II, 271.
- Bradstreet, R. B. See Lewis, B.
- Bradt, H., determination of the mean number of neutrons set free in the splitting of a uranium nucleus, I, 400.
- Bradway, W. E., and Moore, A. R., locus of action of galvanic current in the earthworm, III, 391.
- Brady, F. J., and Wright, W. H., oxyuriasis, III, 223.
- See also Wright, W. H.
- Brady, J. J., opening a tube in vacuum, I, 331.
- Brady, St. E., *Ricinus communis*. I. Oxidation of ricinoleic acid, II, 64.
- Bräncker, E. See Jenckel, E.
- Bräncker, H. See Lipp, P.
- Brager, A., X-ray examination of titanium nitride. I. Single-crystal investigation. III. Investigation by the powder method. I, 13, 61.
- Bragg, (Sir) W. L., structure of a cold-worked metal, I, 245.
- See also Bradley, A. J.
- Brahn, B., insulin suppositories, III, 732. Decurvon, a pectin-insulin, III, 807.
- Braier, B., micro-determination of blood-cholesterol, III, 287.
- Brailovski, V. P. See Borisov, M. D.
- Brain, W. R., exophthalmos in Graves' disease despite sympathetic paralysis, III, 208.
- Braithwaite, D. See Evans, W. V.
- Braithwaite, J. V., and Derek, J. H., hepatosplenomegaly resembling Niemann-Pick's disease: recovery following liver therapy, III, 518.
- Brakš, N. See Straumanis, M.
- Brambilla, M., thermal analysis of ketocineole-camphor systems, I, 74. Complex metallic salts of semicarbazone and oxime of 8-oximinaminomenthone, II, 97.
- Bramley, A., estimates of age of the planet from isotope ratios, I, 342. Dirac equation with spin greater than 1/2, I, 385.
- See also Brewer, A. K.
- Brammell, A., and Leech, J. G. C., [with Dunstall, W. J.], montmorillonite in fuller's earth, Nutfield, Surrey, I, 379.
- Brams, W. A., Golden, J. S., Sanders, A., and Kaplan, L., toxicity and clinical value of strophanthin, III, 439.
- Bramsel, H. See Krant, H.
- Bramwell, C. See Jones, A. M.
- Branch, G. E. K., and Hill, T. L., calculation of the number of stereoisomeres in carbon chain compounds, II, 147.
- See also Hill, T. L.
- Branker, A. V., Hunter, T. G., and Nash, A. W., tie-lines in two-liquid-phase systems, I, 164. Quaternary system acetic acid-chloroform-acetone-water at 25°, I, 361.
- Brand, A. R., and Kellog, P. P., range of hearing of canaries, III, 27.
- Brand, E., Cahill, G. F., and Kassell, B., canine cystinuria. V. Family history of two cystinuric Irish terriers and cystine determinations in dog urine, III, 517.
- and Kassell, B., photometric determination of tryptophan, tyrosine, diiodotyrosine, and thyroxine, II, 32. Determination of reducing groups with porphyrindin, with reference to ovalbumin, III, 619.
- See also Blamey, E. R.
- Brand, F. C. See Sperry, W. M.
- Brand, K., and Renter, K., reduction of organic halogeno-compounds. XIV. Reduction of 2- γ -trichloro- β -hydroxypropylpyridine, II, 105.
- and Stephan, H. W., diphenysuccindene series. XVI. Derivatives of Δ^{10} -diphenysuccindene-9:12-dione. XVII. Δ^{10} -Diphenysuccindene-9:12-dione. XVIII. 9:12-Di-*p*-diphenyl- $\Delta^{9,11}$ -diphenysuccindadiene, II, 48, 124, 134.
- Brandberg, O., encephalographic examinations in organic nervous diseases in children, III, 891.
- Brandes, E. See Fries, K.
- Brandes, J., ultra-violet irradiation of potential somites of gastrula of axolotls, III, 3. Long-period ultra-violet irradiation of potential somites in gastrula of axolotls, III, 3. Effect of ultra-violet light on amphibian morphogenesis. I. Irradiation of organiser centre, III, 553. Effect of ultra-violet irradiation of axolotl gastrula, III, 623. Action of localised ultra-violet irradiation (λ 2800 Å.) on eggs of *Rana esculenta*, III, 699.
- Brandesky, W., treatment of cystitis, III, 223.
- Brandon, A. See Cate, J. ten.
- Brandon, D., seasonal variations of starch content in the genus *Rosa*: relation to propagation by stem cuttings, III, 362.

- Brandon, K. F., application of phage typing to strains of *B. typhosus*, III, 542.
- Brandon, L. See Wibaut, J. P.
- Brandon, T. W. See German, W. L.
- Brandstrup, E., pathogenesis and treatment of hyperemesis gravidarum, III, 905.
- and Sindbjerg-Hansen, V., use of sulph-anilamide in infections of urinary tract during puerperium, III, 919.
- Brandt, C. W., and Neubauer, L. G., miro resin. II. Resin acids, II, 256.
- Brandt, R., standardised mastic test for spinal fluid, III, 890.
- Brandt, W., prenatal development of hair tracts in primates, III, 876.
- Branham, S. E., effect of sulphapyridine and sulphaniilamide with and without serum in experimental meningococcus infection, III, 243.
- Branion, H. D., Tisdall, F. F., and Drake, T. G. H., beryllium rickets in chickens, III, 54.
- Brannon, M. A., and Bartsch, A. F., influence of growth-substances on growth and cell division in green algae, III, 459.
- Branscheid, F., and Ehrhardt, L., relation of lymphocyte count to serum cation content, III, 791.
- Branson, H., and Kersten, H., differential action of X-rays on anterior and posterior regions of *Tubifex tubifex*, III, 784.
- Brantley, L. R. See Overbeek, J. van.
- Braschos, A. See Schmitz-Dumont, O.
- Brasefield, C. J., absorption spectrum of single-crystal ZnS phosphors, I, 147. Effect of an activator on absorption spectrum of zinc sulphide powders, I, 428.
- Brasi, E., lead compounds with polynuclear cations, I, 229.
- Brass, K., and Clar, E., anomalous halides. V. Anomalous halides of anthanthrene and attempted preparation of mono-halides of *peri-naphthindene*, II, 75.
- and Wirnitzer, F., composition and structure of chromium compounds of azo-dyes from salicylic acid, II, 173.
- Brassel, J. See Fierz-David, H. E.
- Brasseur, H., kasolite, I, 333.
- Bratton, A. C., White, H. J., and Marshall, E. K., jun., comparison of pharmacological and anti-bacterial properties of *p*-hydroxylaminobenzenesulphonamide and sulphaniilamide, III, 436.
- Bratzler, J. W., and Forbes, E. B., methane production by cattle, III, 918. See also Forbes, E. B.
- Brauer, P., total light intensity from mixed phosphors, I, 58. Niobium oxides, I, 265.
- Braun, A. C., toxin production by *Pseudomonas tabaci* (Wo. et Fo.), Stapp., III, 352.
- Braun, C. E., Nichols, S. H., jun., Cohen, J. L., and Aitken, T. E., preparation of *d*-glucosyl chloride penta-acetate, II, 297.
- Braun, H. See Schöberl, A.
- Braun-Menéndez, E., and Fasciolo, J. C., vasoconstrictor and hypertensive action of venous blood from kidney in acute incomplete ischaemia, III, 102.
- Fasciolo, J. C., Leloir, L. F., and Muñoz, J. M., blood pressure-raising substance in the blood of ischaemic kidneys, III, 566. Substance causing renal hypertension, III, 711. See also Foglia, V. G., and Muñoz, J. M.
- Brauner, L., and Brauner, M., influence of light on water intake and output of living plant cells, III, 775.
- Brauner, M. See Brauner, L.
- Brauner, R., and Gottlieb, F., alterations in myelogram following Roentgen therapy, III, 377.
- Brauns, R., zircon, I, 421.
- Braunstein, A. E., enzymic trans-amination of amino-acids and its physiological significance, III, 162.
- and Azarkh, R. M., trans-amination of *L*- and *D*-amino-acids in normal muscle and in malignant tumours, III, 149.
- and Bychkov, S. M., cell-free enzymic model of *L*-amino-acid dehydrogenase (*L*-deaminase), III, 161.
- Braunstein, A. L. See Townsend, S. R.
- Braunstein, L. E., subacute yellow atrophy of the liver due to "solvent," III, 338.
- Braunwarth, V., and Schumacher, H. J., photochemical formation of trichlorobromomethane from chloroform and bromine, I, 124.
- Bray, M. M. See Hawks, J. E.
- Bray, R. H. See Dickman, S. R.
- Bray, W. E., and Kelley, O. R., prothrombin in newborn, III, 469. See also Kelley, O. R.
- Brazda, F. G., respiratory exchange of the fresh-water annelid, *Tubifex*, III, 388.
- and Rice, J. C., respiratory metabolism of the fresh-water oligochaete, *Tubifex*, III, 843. See also Rice, J. C.
- Brazer, J. G., and Curtis, A. C., vitamin-A deficiency in diabetes, III, 427.
- Brdička, R., and Klumppar, J., polarographic studies of the denaturation and proteolytic cleavage of proteins, III, 259.
- Breazeale, E. L. See Greene, R. A.
- Bréchet, P., and Haag, E., formation of pyruvic acid in acid media during alcoholic fermentation, III, 350.
- Brecht, E. A., and Rogers, C. H., oxidation of salicylates in alkaline solution, II, 277.
- Breckenbridge, J. G., and Hodgins, J. W. R., co-ordination compounds of α -diamino-isopropanol, II, 38.
- Bredée, H. L., importance of viscosity in concentrated solution for determination of shape and size of particles of highly polymerised substances, I, 211.
- and De Booys, J., viscosity-concentration relations. IV, I, 290. See also De Booys, J.
- Bredov, M. See Artzimovitsch, L.
- Breen, J. See Anslow, W. K.
- Breese, B. B., and McCoord, A. B., vitamin-A absorption in catarrhal jaundice, III, 511. See also Clausen, S. W.
- Breese, D. I., and Lewis, W. C. M., effect of salts on electrophoretic mobility of tristearin at constant η , I, 72.
- Brehmer, E. See Sonn, A.
- Breit, G., interpretation of resonances in nuclear reactions, I, 428.
- Kittel, C., and Thaxton, H. M., *p*-wave anomalies in proton-proton scattering, I, 190.
- and Teller, E., metastability of hydrogen and helium levels, I, 280. See also Hoisington, L. E., and Kittel, C.
- Breithach, J. See Pfeiffer, P.
- Breitenbach, J. W., primary reaction in thermal polymerisation of styrene, I, 259. See also Mark, H.
- Breiting, E., margin of error in mixed groups, III, 554.
- Brekenfeld, sterilisation by boiling in zephrol and quartamon solution, III, 359.
- Bremer, F., Dow, R. S., and Moruzzi, Giuseppe, physiological analysis of general cortex in reptiles and birds, III, 200.
- and Kleyntjens, F., système nerveux cérébro-spinal; [cerebro-spinal nervous system], III, 550.
- Bremer, J. L., pneumatisation of head of common fowl, III, 781. Pneumatisation of humerus in common fowl and associated activity of theelin, III, 782.
- Brendel, B., significance of Weltmann's coagulation band, III, 12.
- Breneman, W. R., limitation of food consumption as factor influencing endocrine reactions in chick, III, 724.
- Brenet, J., rhythm of alpha-particle emission of polonium, I, 89.
- Brennan, H. J., plasma transfusions in haemorrhage, III, 789.
- Brenner, M. See Ruzicka, L.
- Brenner, S. See Steininger, G.
- Brentano, C., thyroxine poisoning as example of insulin-resistant breakdown of glycogen, III, 303. See also Mavros, A.
- Brentano, W. See Meyer, K. H.
- Brescia, F., and LaMer, V. K., energy and entropy of activation of hydrolysis of ethyl orthoformate in deuterium oxide, I, 222.
- LaMer, V. K., and Nachod, F. C., temperature-dependence of dissociation constant of deuteracetic acid, I, 256.
- and Rosenthal, R., at. wt. of hydrogen, I, 2. See also LaMer, V. K.
- Bresler, S. E., molecular-statistical theory of melting, I, 17.
- and Frenkel, J. I., shape and character of thermal motion of long-chain organic molecules and elasticity of rubber-like substances, I, 60.
- Breslow, D. S., and Hauser, C. R., condensations. XI. Condensations of active hydrogen compounds effected by boron trifluoride and aluminium chloride. XII. General theory for carbon-carbon condensations effected by acidic and basic reagents, II, 374. See also Hauser, C. R.
- Bresson, A. See Dastugue, G., and Dodel, P.
- Bretscher, E., radioactivity of ^{10}Be , I, 338.
- and Cook, L. G., production of actinium-C'' from lead, I, 427.
- Bretschneider, H. See Hüchel, W.
- Bretschneider, L. H. See De Wit, J. J. D.
- Breu, W., and Zollner, S., electrocardiographic changes in hyperthyroidism, III, 563.
- Breuer, G., and Schnitzer, J., absorption spectra of *N*-substituted auramine dyes, II, 237.
- Breuhäus, H. C. See Eyerly, J. B.
- Breusch, F. L., fate of oxalacetic acid in different organs, III, 58.
- Brewer, A. K., and Bramley, A., radioactive isotope study of the absorption of phosphorus and sodium by corn seedlings, III, 545. See also Baudisch, O., and Westhaver, J. W.
- Brewer, C. R., bacterial dissimulation of citric acid, III, 353.

- Brewer, G., statistical study of cobalt polycythemia in dog, III, 468.
- Larson, P. S., and Schroeder, A. R., effect of adrenaline on blood-potassium, III, 211.
- See also Larson, P. S.
- Brewer, H. F., Maizels, M., Oliver, J. D., and Vaughan, J., transfusion of fresh and stored blood, III, 878.
- Brewer, J., relation of plasma-potassium level to metabolic activity, III, 792.
- Brewer, W. See Todhunter, E. N.
- Brewster, C. M., and Putman, I. J., jun., odour of alkoxydiphenyls, II, 12.
- Breywisch, W. See Windaus, A.
- Březina, J., and Heyrovský, J., electrolytic reduction of dicyanogen, oxamic acid, and oxamide on a mercury dropping cathode, I, 76.
- Brice, B. A. See Clifford, P. A.
- Brick, R. M., and Creevy, J. A., solubility of nitrogen in liquid iron-chromium and -vanadium alloys, I, 316.
- Bricker, J. W. See Gesell, R.
- Brickley, W. J. See Mallory, T. B.
- Brickman, L., Hawkins, W. L., and Hibbert, H., lignin and related compounds. XLVIII. Identification of vanillin and vanilloyl methyl ketone as ethanolysis products from spruce wood, II, 348.
- Pyle, J. J., Hawkins, W. L., and Hibbert, H., structure of ethanolysis products of spruce and maple wood, II, 254.
- Brickner, R. M., factors in neural bases of intellect and emotion; [rôle of frontal lobes], III, 112. Human cortical area producing repetitive phenomena when stimulated, III, 571.
- Bridges, M. A., and Mattice, M. R., pH of representative foods, III, 142. Control of urine reaction, III, 744.
- Bridgman, P. W., absolute measurements in the pressure range up to 30,000 kg. per sq. cm., I, 155. Compressions to 50,000 kg. per sq. cm., I, 155. New high pressures reached with multiple apparatus, I, 236.
- Brief, B. J. See Phillips, J.
- Brieger, H., weight of salivary glands of white rats after raw meat, vegetable, or mixed diet, III, 551.
- Brier, A. J., contact dermatitis from thurowort (*Eupatorium altissimum*), III, 938.
- Briese, R. R. See Moran, E. A.
- Brigando, J. See Job, P.
- Briggs, A. P., management of diabetes as controlled by tests of acetone in expired air, III, 518.
- Briggs, D. R., metaphosphoric acid-protein reaction, III, 764.
- Briggs, G. See Kerridge, P. M. T.
- Briggs, L. H., constitution of solanone (solanine-s), II, 29.
- Briggs, P. J., Dick, R. C. S., and Hurst, A., simple ulcer of œsophagus and short œsophagus, III, 309.
- Briggs, R. W., tumour induction in *Rana pipiens* tadpoles, III, 747.
- Briggs, T. R., and Ballard, K. H., polyiodides of ammonium. I. Ammonium iodide and iodine, I, 216.
- Ballard, K. H., Alrich, (Miss) F. R., and Wikswo, J. P., polyiodides of ammonium. II. Ternary system ammonium iodide, iodine, water, I, 216.
- Clack, K. D. G., Ballard, K. H., and Sassaman, W. A., polyiodides of potassium. II. Ternary system potassium iodide-iodine-water, I, 216.
- Briggs, T. R., and Geigle, W. F., system sodium iodide-water, I, 215.
- Bright, W. C. See Murphy, E. J., and Whitaker, M. D.
- Brightman, I. J., and Batterman, R. C., treatment of oedema by rectal administration of diuretics, III, 927.
- and Lehman, R. A., experimental study of rectal administration of mercurial diuretics, III, 65.
- Brigl, P., and Müller, H., synthesis of phosphoric esters. I., II, 116.
- Brill, H., and Binzley, R. F., involuntary eye movements as criterion of depth of insulin coma, III, 23.
- Brill, I. C., clinical manifestations of various types of right sided heart failure (cor pulmonale), III, 291.
- Brill, R., Hermann, C., and Peters, C., application of Fourier analysis to chemical linking. III. Binding in quartz. IV. Oxygen binding in oxalic acid dihydrate, I, 62.
- and Rieder, F., experimental detection of adsorbed soap films, I, 356.
- Brimblecombe, A. R., starch content of spotted gum trees, III, 944.
- Brindley, G. W., lattice distortion in cold-worked metals, I, 245.
- Brindley, P. See Selle, W. A.
- Briner, E., catalytic oxidation action of ozone, I, 225. Strongly luminescent oxidation provoked by ozone, I, 229.
- Desbaillets, J., and Höfer, H., chemical action of electric discharges. XIX. Production of ozone by high- and low-frequency electric arcs, I, 226.
- Desbaillets, J., Richard, F., and Paillard, H., chemical action of electric discharges. XVIII. Production of nitric oxide by means of the high-frequency arc; corrections and new results, I, 34.
- and Gelbert, A., ozonisation of cinnamic acid, sodium cinnamate, ethyl cinnamate, and styrene, II, 16.
- Gelbert, A., and Perrotet, F., physicochemical study of the ozonides of ethyl cinnamate and styrene; Raman spectra, ultra-violet absorption, heat of ozonisation, dielectric constant, and dipole moment, I, 57.
- and Höfer, H., chemical action of electric discharges. XIX. Production of hydrocyanic acid and ammonia by action of high- and low-frequency electric arcs on mixtures of nitrogen, carbon monoxide, and hydrogen at ordinary and low pressure, I, 417.
- and Papazian, G., rôle of ozone as an oxidation catalyst; quantitative study of effect of dilution of oxygen and ozone in ozonisation of benzaldehyde and butaldehyde; sensitivity of reactive aldehydes to post-photochemical reactions and to various materials, notably hæmin and nitric oxide, I, 297, 298.
- Brines, J. K., and Lord, E., place of encephalography in prognosis in childhood, III, 394.
- Brines, O. A. See Barker, V. L.
- Brinkhous, K. M., clotting defect in hæmophilia: delayed formation of thrombin, III, 186.
- Smith, H. P., Warner, E. D., and Seegers, W. H., heparin and blood clotting, III, 284.
- and Warner, E. D., effect of vitamin-K on hypoprothrombinemia of experimental liver injury, III, 839.
- Brinkhous, K. M. See also Knowlton, G. C., and Warner, E. D.
- Brinkman, H. C. See Wijk, W. R. van.
- Brinton, H. P., disabling morbidity and mortality among white and negro male employees in the slaughter and meat packing industry, 1930-34, III, 257.
- and Seifert, H. E., disabling morbidity among employees in soap industry, 1930-34, III, 159.
- Briscoe, H. T., and Dirkse, T. P., conductance of salts in monoethanolamine, I, 219.
- Briscoe, H. V. A., chemical properties of siliceous industrial dusts, III, 68.
- See also Evans, E. M., Sebba, F., and Winter, E. R. S.
- Briscoe-Woolley, P. M. See Höber, R.
- Bristol, K. E. See Bartell, F. E.
- Bristes, G., cartilaginous metaplasia in fibroadenoma, III, 837. Cistrix of hydatid cyst in liver, III, 877.
- Britton, H. T. S., universal buffer mixture, I, 272.
- and Königstein, (Miss) M., potentiometric determination of hydroxylamine and hydrazine in alkaline solution, I, 299.
- and Phillips, L., potentiometric titration of glucose with alkaline tartrate solutions of copper, including Fehling's solution, II, 146. Potentiometric determination of glucose with potassium ferrieyanide in sodium carbonate solution, II, 241.
- and Welford, G., physicochemical studies of complex acids. XIV. Vanadic acid. XV. Basic nature of vanadium pentoxide, I, 359. Electrometric studies on precipitation of hydroxides. XV. Amphoteric nature of vanadium tetroxide. XVI. Vanadous hydroxide; nature of vanadous chloride and sulphate solutions, I, 362.
- Britton, J. A., and Walsh, E. L., health hazards of electric and gas welding, III, 606.
- Britton, S. W., and Kline, R. F., augmentation of activity in sloth by adrenal extract, emotion, and other conditions, III, 139.
- Brusova, L. J., and Kore, S., 3-methyl-2-hexyl- Δ^2 -cyclopentenone, II, 224.
- Brobeck, J. R., insulin sensitivity of cats with hypothalamic lesions and cats with cervical cord section, III, 644.
- Magoun, H. W., and Ranson, S. W., insulin sensitivity of monkeys after section of hypophyseal stalk, III, 412.
- Brobeck, W. M. See Alvarez, L. W.
- Broch, O. J., excretion, absorption, and storage of ascorbic acid in guinea-pigs, III, 234.
- Brock, N., Druckrey, H., and Herken, H., significance of potassium in living tissue, III, 151. Action of oxalate on liver glycogenolysis, III, 501.
- Druckrey, H., and Richter, R., source of error in measurement of tissue metabolism by Warburg's "direct" method, III, 516.
- Brock, S., Doty, G. E., Krasno, L., and Ivy, A. C., relation of cervical sympathetic to activity of thyroid, III, 894.
- Brocklehurst, R. J., and Edgeworth, F. H., fibre components of laryngeal nerves of *Macaca mulatta*, III, 482.
- Brockmann, H., and Maier, K., rottlerin. II., II, 51.
- Brooks, H., Forsman antigens in human erythrocytes A₁, III, 559.

- Brockway, L. O., and Coop, I. E., investigation of chlorosilanes and of chloro- and bromo-acetylene by electron diffraction and electric dipole moment measurements on the vapours, I, 62.
- Broda, E. E., Goodeve, C. F., Lythgoe, R. J., and Victor, E., cataphoretic measurements on solutions of visual purple and indicator-yellow, III, 116.
- Brodal, A., cerebellum of rabbit, III, 717.
- Brode, R. B., specific ionisation of high-speed particles, I, 189.
- Brode, W. R., and Appleton, J. L., influence of extraneous elements on the intensity ratio of line pairs used in quantitative analysis. II, I, 329.
- and Eberhart, D. R., relation between absorption spectra and chemical constitution of dyes. XV. Influence of sulphonic acid groups in aminoazodyes, II, 165.
- Broders, A. C. See Welch, C. S.
- Brodie, B. B. See Wallace, G. B.
- Brodsky, I., and Waddy, G., cryptophthalmos or alepharia: survey of condition, review of literature, and presentation of case, III, 891.
- Brody, H., and Goldman, S., metaplasia of epithelium of prostatic glands, utricle, and urethra of the foetus and newborn infant, III, 622.
- Brody, H. W. See Childers, N. F.
- Brody, J., heterophase fluctuations and pretransition phenomena, I, 17.
- Brody, M. B., prolonged narcosis with paraldehyde and dial, III, 926.
- Brody, M. W. See Katzenelbogen, S.
- Brody, R., and Bailey, P. L., unilateral renal agenesis in foetal pig, III, 277.
- Bröchner-Mortensen, K., uric acid content in blood and urine in health and disease, III, 792.
- and Møller, E., creatinuria in thyrotoxicosis, III, 303.
- Broekmeyer, J., determination of urinary indican, III, 667.
- Brömel, H. See Negelein, E.
- Brönsted, J. N., fundamental principles of energetics, I, 289. Derivation of equilibrium conditions in physical chemistry on the basis of the work principle, I, 361.
- and Volqvartz, K., solubility and swelling of high polymerides in ternary mixtures, I, 293.
- Broese, S., electrolyte adsorption and activity coefficient. IV. Adsorption of strong acids on carbon and its calculation, I, 292.
- Brogdon, E. See Hellebrandt, F. A.
- Brogie, M. See Anthony, A. J.
- Broh-Kahn, R. H., bacteriostatic action of sulphanilamide under anaerobic conditions, III, 329.
- Brolin, S. E., castration and size of pituitary, III, 642.
- Broman, I., Fleischmann's theory of lung development, III, 372.
- Bromberg, A. See Lepin, L.
- Bromberg, L. See Kirshtein, M. B.
- Bromiley, R. B., and Brooks, C. M., rôle of neocortex in regulating postural reactions of opossum (*Didelphys virginiana*), III, 801.
- Bronfenbrenner, J. See Kalmanson, G.
- Brink, D. W., the synapse; synaptic mechanisms in sympathetic ganglia, III, 21.
- Bronstein, I. P. See Brown, A. W., and McDonald, J. W.
- Brooker, L. G. S., Sprague, R. H., Smyth, C. P., and Lewis, G. L., colour and constitution. I. Halochromism of anhydronium bases related to cyanine dyes, II, 292.
- Brookhart, J. M., Dey, F. L., and Ranson, S. W., failure of ovarian hormones to cause mating reactions in spayed guinea-pigs with hypothalamic lesions, II, 735.
- Brooks, B., and Duncan, G. W., effects of pressure on tissues, III, 634.
- Brooks, C. M., and Lambert, E. F., effect of hypophyseal stalk transection on gonadotropic functions of rabbit's hypophysis, III, 403.
- and Peck, M. E., effect of various cortical lesions on development of placing and hopping reactions in rats, III, 485.
- See also Bromiley, R. B.
- Brooks, D. B., Howard, F. L., and Crafton, H. C., jun., physical properties of purified β -trimethylpentane, I, 154. Physical properties of purified aliphatic hydrocarbons, I, 201.
- Brooks, D. J. See Macht, D. I.
- Brooks, F. See Steinbocker, O.
- Brooks, G., phosphorescence of the three last rings of the glow-worm, III, 421.
- Brooks, J., and Pace, J., manometric determination of nitrite in solution and in tissue, III, 462.
- Brooks, M. M., effect of radioactive elements on metabolism of cells, III, 329. Sulphauilamide and glucose antidote, III, 677.
- Brooks, S. C., ion exchanges in accumulation and loss of ions by living protoplasm of *Nitella*, III, 259. Intake and loss of radioactive cations by marine eggs, III, 329.
- See also Mullins, L. J.
- Broom, J. C., and Brown, H. C., serological characters of *Trypanosoma brucei* after cyclical development in *Glossina morsitans*, III, 933.
- Broom, R., classification of sub-human types, III, 784.
- Broster, L. R., Cushing's syndrome, III, 577.
- Brothner, R. J., aetiology of hypertension resulting from coarctation of the aorta, III, 102.
- Brotherhood, J. S., illuminating box for flocculation (Kahn) and sedimentation tests, III, 176.
- Brotzge, G. C. See Fardon, J. C.
- Broughton, F. See Talbot, N. B.
- Broughton, G., catalysis by metallised bentonites, I, 168.
- Brouwer, H. A., metamorphic differentiation in hartschiefer of Northern Sweden, I, 237.
- Brower, A. B. See Furth, O. B.
- Brown, A. See Bayliss, L. E., Keith, J. D., Silverthorne, N., and Summerfeldt, P.
- Brown, A. W., Bronstein, I. P., and Kraines, R., hypothyroidism and cretinism in childhood. VI. Influence of thyroid therapy on mental growth, III, 28.
- See also McDonald, J. W.
- Brown, B. B. See Bosch, W. C.
- Brown, B. M. See Vernon, A. A.
- Brown, B. W. See Curtiss, L. F.
- Brown, C. E., and Eder, L. F., acute puerperal hypophyseal necrosis, III, 402.
- and McNamara, D. H., acute interstitial myocarditis following administration of arspenamines, III, 927.
- Brown, C. J., and Cox, E. G., crystal structure of potassium sulphamate, I, 150.
- Brown, C. J. O. See Stokes, H. L.
- Brown, C. L., and Ginsburg, I. W., osteoporosis associated with extensive metastatic calcification and chronic renal disease, III, 813.
- Vogel, S. R., and Meader, R. P., possible relationship of digestive tract disease to type of osteoporosis, II, 310.
- Brown, D. B., macroscopic staining of brain, III, 551.
- Brown, E. F. See Gray, E. Le B., and Luce-Clausen, E. M.
- Brown, E. V. L., retrolental tissue from choroid in Kuhlnt-Junius degeneration of macula, III, 722.
- Brown, F. A., jun., and Scudamore, H. H., differentiation of two principles from crustacean sinus gland, III, 405.
- Brown, F. W., binding energy of ^3H , I, 55.
- and Plesset, M. S., equality of the proton-proton and proton-neutron interactions, I, 5.
- See also Plesset, M. S.
- Brown, G. B. See Du Vigneaud, V.
- Brown, G. D., and Thompson, W. H., development of diabetic child, III, 732.
- Brown, G. E. See Gilman, H.
- Brown, G. G. See Deschner, W. W.
- Brown, G. L., and Harvey, A. M., dietary calcium and neuro-muscular transmission, III, 296.
- and Maycock, W. D'A., vascular reactions of cat after sympathectomy, III, 293.
- Brown, Henry, thermal separation ratios calculated from viscosity data, I, 155.
- Brown, Herman. See Klauder, J. V.
- Brown, H. C., rapid serological test for Weil's disease, III, 269.
- See also Broom, J. C.
- Brown, Herbert C. See Kharasch, M. S.
- Brown, H. F., and Cranston, J. A., hydrolysis of salts in solution, I, 296.
- Brown, H. O. See Dublin, W. B.
- Brown, H. P., and Austin, J. A., tin derivative of dithiopyrocatechol, II, 168.
- Treatment of heartworms in dogs with stibisol, III, 761.
- Brown, J. B., and Green, N. D., fatty acids. V. Preparation of methylricinoleate and ricinoleic acid by fractional crystallisation, II, 203.
- See also Burr, G. O., and Shinowara, G. Y.
- Brown, J. H., China berry poisoning in pigs, III, 603.
- Brown, J. P. See Titcher, L. L.
- Brown, J. S., factors of composition and porosity in lead-zinc replacements of metamorphosed limestone, I, 304.
- Brown, J. W., use of Warburg respirometers in plant physiological investigations, III, 545.
- Brown, L. T. See Ogden, E.
- Brown, M. See Paskind, H. A.
- Brown, M. G. See Riseman, J. E. F.
- Brown, M. H., effects of cortical and striatal lesions on motor performance in macaques, III, 394.
- Brown, Milton H., and Bishop, A. J., specificity of typhoid and paratyphoid vaccines, III, 542.
- Brown, M. R. See Talbot, J. H.
- Brown, N. A., colchicine in the prevention, inhibition, and death of plant tumours, III, 364.
- See also Dermen, H.
- Brown, N. C. See Baker, W.

- Brown, P. W., adequate vitamin dosage, III, 857.
See also Donald, C. J.
- Brown, R., permeability to gases of seed-coat membranes of *Cucurbita pepo*, III, 939.
- Brown, R. A. See Emmett, A. D.
- Brown, R. C. See Kretschmer, H. L.
- Brown, R. H., and Page, H. E., pupil dilatation and dark adaptation, III, 116.
- Brown, R. S. See Adams, A. B.
- Brown, S., McCarthy, J. E., and Fine, A., cardiovascular dynamics, III, 884.
- Brown, W. E., ethyl *n*-propyl ether as anesthetic, III, 525.
See also Peck, W. S.
- Brown, W. G., and Eberly, K., hydrogen exchange reactions of esters in relation to reactivity in condensation reactions, I, 121.
and Widiger, A. H., mechanism of acid-catalysed dimerisation of anethole, I, 122.
- Brown, W. H., Thornton, W. B., and Wilson, J. S., absorption, distribution, and excretion of sulphapyridine, III, 151. Clinical toxicity of sulphanilamide and sulphapyridine, III, 758.
and Wright, G. F., methoxy-mercurials from *cis*- and *trans*-styryl cyanide, II, 334.
See also Detweiler, H. K., and Kinsey, H. I.
- Brown, W. R. See Mettler, F. A.
- Browne, A. W. See Sherk, K. W., and Wheat, J. A.
- Browne, D. G., and McHardy, G., management of peptic ulcer hæmorrhage, III, 36.
- Browne, H. C. See Wilder, R. M.
- Browne, J. S. L., Karady, S., and Selye, H., effect of noxious agents on creatine, creatinine, chloride, and water excretion, III, 156.
See also Howlett, J., Karady, S., Rose, B., and Weil, P. G.
- Brownell, K. A. See Hartman, F. A.
- Browning, P., chemotherapy of experimental staphylococcal infection in mice with drugs of the sulphanilamide group, III, 676.
- Brownlee, A. See Linton, R. G.
- Brownlee, G., porphyrin excretion following antipyretics, III, 339. Pharmacology of cincole and phellandrene, III, 864.
- Brownlee, I. E. See Bullowa, J. G. M., and Osgood, E. E.
- Broyer, T. C. See Overstreet, R.
- Brubaker, G., scattering of α -particles by nitrogen, I, 89.
- Brubaker, R. E. See Gardner, W. J.
- Bruce, H. M., and Wien, R., riboflavin, riboflavinphosphoric acid, cortical hormone, and survival of adrenalectomised rats, III, 727.
- Bruce, J. H., and Hickling, A., electrical conduction of commercial boron crystals, I, 63.
- Brucer, M. See Robinson, S. C.
- Bruch, H., basal metabolism and serum-cholesterol of obese children, III, 517. Froehlich syndrome, III, 730. Food intake of obese children, III, 748. Obesity in childhood. I. Physical growth and development of obese children, III, 782.
See also Langmann, A. G.
- Bruch-Willstätter, M., and Sponer, H., calculation of transition energies of polymorphous molecular crystals, I, 351.
- Bruchsaler, F. S., congenital absence of gall bladder and obliteration of extra-hepatic bile ducts, III, 178.
- Bruckner, I. E., and Evans, D. G., toxin of *B. paraperitussis* and relationship of the organism to *H. pertussis* and *Br. bronchiseptica*, III, 169.
- Bruckner, J. H., and Hutt, F. B., linkage of pea comb and blue egg in fowl, III, 465.
- Brüche, E., and Haagen, E., simple super-microscope and its application in bacteriology, I, 175.
- Brücke, F. T. von, and Hueber, E. F. von, combined treatment of a carcinomatous metastasis by colchicine and X-rays, III, 258.
- Brückmann, G., and Zondek, S. G., iron, copper, and manganese in human organs at various ages, III, 42. "Congenital" copper deposit in rat, III, 742. Determination of non-hæmin iron, III, 832.
- Brückner, R. See Süllmann, H.
- Brüggenmann, H. See Zorn, W.
- Brühl, B., effect on vitamin-C balance and bactericidal power of blood of combined vitamin preparation "tetraviton," III, 231.
- Buehl, W., antiallergic action of insulin, III, 732.
- Brüll, J., *trans-cis*-isomerisation of cobaltic complexes, I, 30.
- Brüll, L., Errera, J., and Sack, H., Raman study of alcohol association, I, 256.
- Brues, A. M., Marble, B. B., and Jackson, E. B., effects of colchicine and radiation on growth of normal tissues and tumours, III, 508.
and Salter, W. T., experimentally induced benignancy of neoplasm. IV. Suppression of mitotic activity by so-called immunisation, III, 671.
- Subbarow, Y., Jackson, E. B., and Aub, J. C., growth inhibition by substances in liver, III, 742.
- Weiner, A. E., and Andervont, H. B., relation between latent period and growth rate in chemically induced tumours, III, 316.
See also Nathanson, I. T., and Shaw, D. T.
- Bruевич, S. V., age of recent lacustrine period of the Caspian Sea and metamorphisation of salts of the river discharge in the sea, I, 44.
- Bruévitsch, S. V., Pevsnyak, R. M., Ponizovskaja, V. L., and Sibirjakov, M. A., effect of bottom deposits on chemistry of fresh-water basins, I, 332.
- Bruger, M., and Carter, R. F., evidence of communication between renal and omental blood vessels following nephromentectomy for arterial hypertension in man, III, 191.
See also Chassin, M. R., Jourdonais, L. F., and Miller, J. H.
- Brugger, W. See Ott, Erwin.
- Brugi, G., structure of human metathalamus, III, 111. Myelination of lateral geniculate body in new-born infants, III, 111. Structure of connective involucrum of rami communicantes of thoracic sympathetic nerve, III, 466.
See also Bolognesi, G.
- Brugsch, J. T. See Brunsting, L. A.
- Brugsch, T., Nonnenbruch, Heilmeyer, L., Rissel, E., Lauda, E., Pratt, J. H., Hurst, A., Snell, A. M., Grunke, W., Fiessinger, N., and Franke, K., clinical use of tests of liver function, III, 501.
- Bruhn, J. M. See Elder, J. H.
- Bruining, H. See De Boer, J. H.
- Bruins, E. M., decay of penetrating cosmic rays. II. and III., I, 54, 91.
See also Clay, J.
- Brull, L., renal vasodilating action of thyroxine, III, 313. Renal diuretic action of thyroxine, III, 313.
- Brull, R. See Kaufmann-Cosla, O.
- Brumberg, E. M., new method of microscopy in ultra-violet rays, I, 234.
- Brumfiel, D. M. See Gardner, L. U.
- Brumfield, R. T., anaphase movement in *Allium cernuum*, III, 837.
- Brummelkamp, R., number of cortical cells and spinal cord length, III, 719.
and Offringa, J., relative growth of frontal brain during human onto- and phylogensis, III, 622.
- Brun, G. C., does sulphanilamide stimulate metabolism? III, 151. Preparation of extracts for biological assay of powdered digitalis, III, 439.
- Brunati, J., protective action of certain substances against toxic effects of histamine; rôle of glucose, III, 333.
- Brunauer, S., Deming, L. S., Deming, W. E., and Teller, E., theory of the van der Waals adsorption of gases, I, 355.
and Emmett, P. H., chemisorption of gases on iron synthetic ammonia catalysts, I, 355.
- Brunel, A. See Gay, L.
- Bruner, D. W., and Edwards, P. R., application of endospore stain to blood smears from opsonophagocytic tests, III, 379.
- Bruner, H. D., leucocytosis following parenteral administration of liver extract in man, III, 91.
See also Swinyard, C. A.
- Brunetti, F., cinematographic demonstration of apparatus for provoking rotatory nystagmus in experimental animals, III, 119.
- Brunner, R. A. See Wikoff, H. L.
- Brunner, W. See Clairmont, P.
- Bruno, F., histological changes in skin of laboratory and wild mice after single or repeated injections of horse serum, III, 340.
- Bruns, E., Frumkin, A., Jofa, S., Vanjukova, L., and Zolotarevskaja, S., maxima on current-voltage curves, I, 257.
- Bruns, W. See Baumgarten, P.
- Brunschwig, A., and Clarke, T. H., histological structure of carcinoma of stomach and quality of gastric secretions, III, 414.
and Humphreys, E., phæochromocytoma of adrenal, III, 895.
and Schmitz, R. L., rapidity of passage of chloride ion from blood into gastric juice of stimulated stomach, III, 741.
- Schmitz, R. L., and Jennings, S., selective localisation of Evans-blue (T 1824) in subplacental portions of endoderm in rat, III, 783.
- Tschetter, D., and Hamann, A., injection of human wart (verruca vulgaris) extracts into rabbits with benzpyrene papillomas on the ear, III, 422.
- Brunssen, H. See Chrometzka, F.
- Brunsting, L. A., Brugsch, J. T., and O'Leary, P. A., porphyrin metabolism in skin diseases, III, 148.
and Love, W. R., tempering effect of sodium bismuth thioglycollate (thio-bismol) on therapeutic malaria, III, 863.

- Brunton, C. E., acetylcholine and exophthalmos (dog), III, 202.
- Brunson, H. A., and Kroeger, J. W., cyclization of aromatic compounds by the Friedel-Crafts reaction, II, 78.
- Bruun, E., hereditary hæmorrhagic diathesis, III, 283.
- Bruun, J. H., pressure regulator for dynamic gaseous systems, I, 84. Capillary flowmeter with variable orifices, I, 134. Flow divider for gases, I, 273.
- Bruynes, H. See Albertson, W. E.
- Bružs, B., conversion energies, I, 27.
- Bryan, W. L., and Mason, K. F., prolonged maintenance of mammary carcinoma in vitamin-E-deficient rats, III, 589.
- Bryan, W. R., and Beard, J. W., factors determining frequency distribution of lesions induced by papilloma protein and vaccinia virus, III, 614.
- See also Wolfe, J. M.
- Bryant, J. E. See Kirsner, J. B.
- Bryant, J. T. See Alber, H. K.
- Bryant, W. M. D., Mitchell, J., jun., and Smith, D. M., analytical procedures employing Karl Fischer reagent. II. Determination of alcoholic hydroxyl. III. Determination of organic acids, II, 146.
- See also Smith, D. M.
- Bryskier, A. See Binet, L.
- Buchanan, A. R., galvanic reaction in guinea-pigs. IV. Reaction in animals with unilateral lesions in brain stem, III, 400.
- and Ladd, L. D., galvanic reaction in guinea-pigs. III. Reaction following section of 8th nerve, III, 400.
- Buchanan, C. See Patterson, T. S.
- Buchanan, J. See Percival, E. G. V.
- Buchanan, J. A., multiple symmetric gangrene occurring during prolonged administration of amidopyrine, III, 604.
- Buchem, F. S. P. van, and Hendriksen, J. J. M., blood syndrome in carcinoma with bone-marrow metastases, III, 183.
- Bucher, K., and Staub, H., glycogen in blood, III, 562.
- Buchholtz, M. See Ferguson, C.
- Buchholz, A. M., effect of specific kidney antisera on normal kidney, III, 503.
- Buchholz, K. See Lüttringhaus, A.
- Buchman, E. R., Heegaard, E., and Bonner, J., inhibition of carboxylases by thiazole pyrophosphate, III, 931.
- See also Borsook, H.
- Buchs, S. See Freudenberg, E.
- Buchwald, C. E., and Haskins, C. P., biological effects of low-voltage electrons, III, 763.
- and Whelden, R. M., stimulation of growth in *Aspergillus niger* under exposure to low-velocity cathode rays, III, 450.
- See also Whelden, R. M.
- Buchwald, K. W. See Kletzien, S. W.
- Bucy, P. C. See Weaver, T. A., jun.
- Buda, A. M. See Turell, R.
- Buddhue, J. D., constituents of meteorite rusts, I, 378. Two new constituents of meteoritic gases, I, 396.
- Budelmann, G., cardiac and circulatory failure and coronary insufficiency, III, 191.
- Budenholzer, R. A., Sage, B. H., and Lacey, W. N., phase equilibria in hydrocarbon systems. XXVIII. Joule-Thomson coefficients for gaseous mixtures of methane and *n*-butane, I, 203.
- See also Sage, B. H.
- Budnitz, E. See Altschule, M. D.
- Budó, A., influence of molecular shape and of freely rotating dipole groups on dielectric relaxation, I, 97.
- Büchi, J., and Feinstein, K., percolation process, I, 177.
- Buechmann, P. See Stodtmeister, R.
- Bueding, E., and Ladewig, P., glycuronic acid produced by surviving slices of liver from animals poisoned with phosphorus or chloroform, III, 328.
- and Wortis, H., stabilisation and determination of pyruvic acid in blood, III, 561. Pyruvic acid in blood and cerebrospinal fluid, III, 718.
- See also Wortis, H.
- Buehl, C. C. See Prosser, G. L.
- Buehl, R. C., and Hippel, A. von, electrical breakdown strength of ionic crystals as a function of temperature, I, 14.
- Buehler, C. A., Bass, B. C., Darling, R. B., and Lubs, M. E., proof of structure of 6-chloro-8-chloromethyl-1:3-benzodioxan by oxidation, II, 231.
- Bühler, F., hormonal treatment of migraine, III, 202.
- and Noetzel, R., cellular content of gastric juice, III, 218.
- Buehrer, T. F. See Reitemeier, R. F.
- Bülbring, E., relation between cortical hormone and size of the testis in drake: effect of different oils as solvents; deoxycorticosterone acetate, III, 680.
- and Burn, J. H., vascular changes and transmission of nerve impulses, III, 110. Effect of sympathomimetic and other substances on contraction of skeletal muscle, III, 332.
- Buell, M. V. See Winkenwerder, W. L.
- Bünger, W. See Zorn, W.
- Bürger, K., apparatus for Pregl-Beckmann micro-determination of mol. wt., I, 273.
- Buerger, M. J., crystal structure of gudmundite, I, 240.
- Buerger, N. W., polymorphism of Cu_2S and the relations between solid phases in the system Cu_2S - CuS , I, 86.
- Bürgers, J., mechanism of action of prontosil and similar substances, III, 436.
- Buermann, A., and Alexander, L., reaction of cerebral vessels to intracarotid injection of horse serum in sensitised and non-sensitised guinea-pigs, III, 16.
- See also Storch, T. J. C. von.
- Büsing, K. H. See Illényi, A.
- Büsemaker, J., and Sonnenberg, action of pervitin on respiratory quotient during exercise, III, 439.
- Büttiker, W. See Zetzsche, F.
- Bugelski, T. J. See Emery, F. E.
- Bugnard, L. See Baisset, A., and Ducuing, J.
- Buirge, R. E. See Dennis, C.
- Bujanovskaja, I. S., purified, dry preparations of lysozyme, III, 72.
- See also Jermolieva, Z. V.
- Bujnov, M., Komar, A., Shuravleva, M., and Tschufarov, G., orientation of phases formed during reduction of magnetite by hydrogen, I, 128.
- Bukantz, S. C., relation between growth of pneumococcus III and concentration of capsular polysaccharide appearing in culture filtrates, III, 770.
- Bukantz, S. C., and Bullowa, J. G. M., determination of pneumococcal capsular polysaccharide by photon-reflectometric titration of precipitation with excess antibody, III, 612.
- De Gara, P. F., and Bullowa, J. G. M., occurrence of precipitation zones in mixtures of serum and sodium deoxycholate; significance in pneumococcolysis, III, 935.
- See also Bullowa, J. G. M.
- Bukey, F. S., and Weaver, J. E., effect of frequent clippings on the underground food reserves of prairie grasses, III, 362.
- Bukhsh, W., and Desai, R. D., heterocyclic compounds. X. Synthesis of substituted 1:2:3:4-tetrahydroacridones, II, 107.
- Bull, H. B., electroviscous effect in egg-albumin solutions, I, 115. Viscosity of solutions of denatured and of native egg-albumin, I, 211.
- Bull, S., tables of gold, cerium, and silver isotopic disintegration series, I, 426. Uranium-thorium-radium-lead disintegration series, I, 426. Explorations in stereochemistry. I. Problems of three-dimensional chemistry. II. Mechanism of gravitation, transmission of energy in space, and the luminiferous ether. III. Association of spheres and the space lattice. IV. Association of polyhedra. V. Effect of energy on the space lattice. VI. Preparation of tables of association in the simple cubic mode. VII. Stereochemistry of water. VIII. Stereochemistry of ice at atmospheric pressure. IX. Freezing point of water. X. Transmutations of the sulphur molecule. XI. The sulphuric anhydride-water reaction, I, 430. Stereochemistry of benzene, I, 431. Stereochemistry of the atmosphere, I, 431. Stereochemistry of gold, I, 431. Stereochemistry of silicon dioxide, I, 431. Stereochemistry of the octanes, I, 431. Stereochemistry of hydrogen gold nitrate trihydrate, I, 431. Stereochemistry of the thiocyanates, thioureas, mustard oils, thiazoles, and allied substances, I, 431. Stereochemistry of ammonium copper chloride dihydrate, I, 431. Solubility of iodine in water, I, 438. Mechanism of mutual solubility of water and β -ethylhexanol, I, 438. Oil-soap jellies, I, 439. Stereochemistry of ultra-dilute solutions, I, 439.
- Bullard, E. C., heat flow in South Africa, I, 178.
- Bulliard, H., and Grundland, I., effect of polypeptides on genital tract of white rat, III, 30.
- Bullinger, E. See Roche, J.
- Bullock, L. T., Jones, J. C., and Dolley, F. S., diagnosis and effects of ligation of patent ductus arteriosus, III, 383.
- Bullough, W. S., and Carriek, R., spring development of gonads of starling, III, 125. Male behaviour of female starling (*Sturnus v. vulgaris*, L.) in autumn, III, 657.
- Bullowa, J. G. M., serotherapy of the pneumonias, III, 599.
- and Gleich, M., pneumococcal pneumonia of type XIV in children treated with specific serum, III, 678.
- Osgood, E. E., Bukantz, S. C., and Brownlee, I. E., effect of sulphapyridine alone and with serum on pneumococcal pneumonia and on pneumococcus-infected marrow cultures, III, 520.

- Bullowa, J. G. M. See also Bukantz, S. C., Ratish, H. D., and Seudi, J. V.
- Bulmer, F. M. R., Rothwell, H. E., Polack, S. S., and Stewart, D. W., chronic arsine poisoning amongst workers employed in cyanide extraction of gold: report of fourteen cases, III, 606.
- Bumm, H., formation of binary superstructure phases [in copper-gold and iron-nickel alloys] under the influence of additions [of other metals] with limited solubility, I, 107.
- Bunak, V., typology of growth curves of human body, III, 554.
- Bunch, C. C., usable hearing, III, 723.
- Bundesen, H. N., Fishbein, W. I., Abrams, I. R., and Miller, R. D., immune human placental globulin in measles prophylaxis, III, 938.
- Bunker, J. W. M., Harris, R. S., and Mosher, L. M., relative efficiency of active wave-lengths of ultra-violet in activation of 7-dehydrocholesterol, I, 226. Activation of sterols, III, 820. See also Harris, R. S.
- Bunnell, I., and Griffith, F. R., jun., use of illuminating gas to check metabolism apparatus, III, 945.
- Bunting, C. H., new formation of elastic tissue in adhesions between serous membranes and in myocardial scars, III, 4.
and Longley, B. J., morphological changes in kidney of rat during establishment of tolerance to trypanamide, III, 681.
- Bunting, E. N. See McMurdie, H. F.
- Bunting, H., sedimentation rates of sickled and non-sickled cells from patients with sickle cell anemia, III, 184.
- Burack, E. See Wolfe, J. M.
- Burbank, R. See Hume, E. M.
- Burch, G. E., auricular fibrillation of 22 months' duration with return to normal sinus mechanism without the aid of quinidine, III, 98. (Edema of eyelids, III, 477.
- DeBakey, M., and Sode-man, W. A., effect of venous pressure on volume pulsation, III, 384.
and Voorhies, N. E., incidence of coronary occlusion and angina pectoris in white and negro races, III, 292.
See also DeBakey, M.
- Burch, J. C. See Williams, J. R., jun.
- Burcham, W. E., and Devons, S., resonance phenomena in disintegration of fluorine by protons, I, 140.
See also Bower, J. C.
- Burchell, H. B., large vascular sinuses in myocardium of dog, III, 277. Coronary circulation after occlusion, III, 474.
- Barnes, A. R., and Mann, F. C., electrocardiographic picture of experimental localised pericarditis, III, 289.
- Burchenal, J. H., experimental studies on relation of pregnancy to leukaemia, III, 854.
- Burcik, E. J., and Yost, D. M., heat capacity of cyanogen gas, I, 64.
- Burekhardt, E. See Ruggli, P.
- Burden, S. S. See Newell, J. M.
- Burdett, P. H., Magoffin, J. E., and Cameron, F. K., influence of electrolytes on ballo-electric effect, I, 362.
- Burdick, H. O., and Emerson, B., repression and resorption of corpora lutea of early pregnancy following injections of testosterone propionate, III, 215.
- Burdick, H. O., Emerson, B. B., and Whitney, R., effects of testosterone propionate on pregnancy and passage of ova through oviducts of mice, III, 734.
- Bureau, V., and Vilter, V., action of colchicine on epithelial cells of axolotl, III, 337. Should colchicine be considered a stimulant of cellular division? III, 337.
- Bureš, E., and Hadáček, J., condensation of isatin and urea, II, 56.
and Meškan, F., 3:5-dibromo- and 3:5:6-tribromo-p-xylydine and derivatives, II, 40.
and Rosenberg, Z., wheat-germ oil, III, 273.
and Spitniková, A., 2:4:6-trichloro-5-nitro-m-toluidine and derivatives, II, 40.
and Volák, F., chemistry of *Asculus* saponin and its structure, II, 50.
- Burfoot, J. D., jun., origin of talc and soapstone deposits of Virginia, I, 398.
- Burg, A. van der. See Johnson, F. H.
- Burg, A. B., methylboric acid and its anhydride; methylboron fluorides, II, 368.
- Burger, A., and Avakian, S., attempted synthesis of morphenol, II, 103.
and Modlin, L. R., jun., petroleum bases. I. Reactions of 2:3:8-trimethylquinoline, II, 288.
- Burger, H. C., and Cittert, H. P. van, intensity measurements of helium lines in absorption, I, 87.
- Burgers, J. M., fields of stress connected with dislocations in a regular crystal lattice. I. II. Solutions of equations of elasticity for a non-isotropic substance of regular crystalline symmetry, I, 14. Application of viscosity data to determination of shape of protein molecules in solution, I, 211. Geometrical considerations on structural irregularities to be assumed in a crystal, I, 247.
- Burges, A., defensive mechanism in orchid mycorrhiza, III, 617.
- Burgin, J., Engs, W., Groll, H. P. A., and Hearne, G., halogenation of hydrocarbons; chlorination of olefines containing an unsaturated *tert.* carbon atom, II, 2.
- Burgmann, P. See Lauber, H. J.
- Burgoyne, J. H., combustion of aromatic and alicyclic hydrocarbons. IV. Kinetics of slow combustion of benzene and its monoalkyl derivatives at low temperatures. V. Products of combustion of benzene and its monoalkyl derivatives, I, 221; II, 325.
- Tang, T. L., and Newitt, D. M., combustion of aromatic and alicyclic hydrocarbons. III. Ignition and cool-flame characteristics, I, 221.
- Burhop, E. H. S., and Massey, H. S. W., inner shell ionisation of atoms by electron impact, I, 88.
- Burk, D. See György, P., and Lipmann, F.
- Burk, N. F., osmotic pressure, mol. wt., and dissociation of *Limulus* haemocyanin, III, 607.
- Burk, R. E. See Selker, M. L.
- Burke, D. See Behrens, O. K.
- Burke, J. C., and McIntyre, A. R., nicotinic acid and the vitamin-B complex in insulin tolerance, III, 65.
- Burke, W. J. See Moskowit, S., and Smith, A. R.
- Burkett, H. See Riebsomer, J. L.
- Burkhardt, G. N. See Aldersley, J. B.
- Burkhardt, W. L. See Turner, C. D.
- Burkholder, P. R., production of growth-substance by bacteria in media containing specific organic and inorganic nitrogenous compounds, III, 452.
- Burkser, E. S., and Burkser, V. V., physico-chemical investigation of Alcalit muds, I, 332.
- Kitaer, E. J., and Fuchs, M. M., Soljony Liman, I, 332.
- Burkser, V. V. See Burkser, E. S.
- Burky, E. L. See Woods, A. C.
- Burlew, J. S., measurement of heat capacity of a small volume of liquid by the piezo-thermometric method. I. Apparatus for measuring ($\partial T/\partial P$)s and results for benzene and toluene. II. Coefficient of thermal expansion of benzene and of toluene measured with a new type of weight dilatometer. III. Heat capacities of benzene and toluene form 8° to b.p., I, 247.
and Smith, Rodney P., direct calibration of a copper-constantan thermel for measurement of temperature differences at a series of temperatures, I, 271.
- Burman, M. S., clinical experiences with curare preparations and curare substitutes, III, 682.
- Burn, J. H. See Bülbring, E.
- Burnet, F. M., and Jackson, A. V., poliomyelitis. II. Significance of neutralising antibodies in human sera, III, 77.
Jackson, A. V., and Robertson, E. G., poliomyelitis. I. Intraocular inoculation as standard method for demonstration of neutralising antibodies, III, 77.
and Lush, D., action of surface-active agents on viruses, III, 937.
- Burnet, W. E. See Farrar, G. E.
- Burnett, G. W. See Hodes, H. L.
- Burnham, H. D., and Pease, R. N., inhibition of ethylene polymerisation by nitric oxide, I, 224. Inhibition of hydrogenation of ethylene by nitric oxide, I, 224.
- Burnop, V. C. E., Elliott, G. H., and Linstead, R. P., fused carbon rings. XIX. Synthesis of tetracyclic compounds of the sexual hormone type, II, 282.
and Linstead, R. P., fused carbon rings. XVIII. Further investigations of model substances of the sexual hormone type, II, 281.
- Burns, B. D. See Owen, E. A.
- Burns, D., what is physical fitness? III, 106. Negative intrapleural pressure, III, 887.
and Secker, J., physical fitness of pre-adolescent boys, III, 529.
- Burns, E. L., and Schenken, J. R., spontaneous primary hepatomas in mice of strain C3H: incidence, sex distribution, and morbid anatomy, III, 670. Relation between oestrogen and mammary carcinoma in strain C3H mice, III, 747.
See also Stasney, J.
- Burns, J. R. See Arnow, L. E.
- Burns, R. K., differentiation of sex in *Opossum* and its modification by testosterone propionate, III, 902. Sex differentiation during early female stages of *Opossum* and comparison of anatomical changes induced by male and female sex hormones, III, 902.
- Burpee, C. M., Robinow, M., and Leslie, J. T., gonorrhoeal vaginitis in girls treated with oestrone (theelin) fever and sulphanilamide, III, 31.
See also Mettler, F. A.

- Burr, G. O., Brown, J. B., Kass, J. P., and Lundberg, W. O. L., comparative curative values of unsaturated fatty acids in fat deficiency, III, 751.
See also Barnes, R. H., Kass, J. P., and Miller, E. S.
- Burr, H. S., biological organisation and cancer problem, III, 589.
- Burr, R. C., osteochondritis dissecans, III, 551.
- Burrell, P. C., root-tip smear method for difficult material, III, 467.
- Burrell, R. C., and Ebright, V. R., vitamin-C content of fruits and vegetables, III, 751.
- Burrett, J. B. See Greenwald, L.
- Burriel, F. See Del Campo, A.
- Burriel, M. W., and Greene, R. R., andromimetic function of the immature male rat adrenal, III, 497. Androgen production in normal intact and castrate immature female rats, III, 645. Liver and endogenous androgens, III, 734.
- Greene, R. R., and Ivy, A. C., experimental intersexuality: lateral asymmetry in rat intersexes, III, 699.
See also Greene, R. R., and Ivy, A. C.
- Burroughs, E. W., Burroughs, H. S., and Mitchell, H. H., independence of endogenous and exogenous nitrogen metabolism, III, 517. Amino-acids required for the complete replacement of endogenous losses in the adult rat, III, 859. Interdependence among amino-acids in their utilisation in endogenous metabolism, III, 859.
- Burroughs, H. S. See Burroughs, E. W.
- Burrows, H., hypospadias and non-descent of testes caused in rats by progesterone, III, 130.
- Burrows, R. G. R. See Coope, R.
- Burrows, W. H., and Titus, H. W., semen production in male fowl, III, 217.
- Burschies, K., importance of chaulmoogric acid and its derivatives in chemotherapy of leprosy and tuberculosis, III, 356.
See also Rothermundt, M.
- Burstein, C. L., effect of spinal anaesthesia on intestinal activity, III, 134.
and Marangoni, B. A., protecting action of procaine against ventricular fibrillation induced by adrenaline during cyclopropane anaesthesia, III, 474.
See also Marangoni, B. A.
- Burstein, E., Aliminosa, L. M., and Moriber, L., effect of direct and alternating currents on growth of oat seedlings, III, 831.
- Burt, G. J. See Greengard, H.
- Burt, W. E. See Woodruff, E. H.
- Burtner, R. R., and Lehmann, G., heterocyclic local anaesthetics; carbazole, dibenzofuran, and dibenzthiophen derivatives, II, 192.
- Burton, A. C., range and variability of blood flow in human fingers and vasomotor regulation of body temperature, III, 193.
- Scott, J. C., McGlone, B., and Bazett, H. C., slow adaptations in heat exchanges of man to changed climatic conditions, III, 762.
- Burton, A. F., action of coramine on nervous system, III, 252.
- Burton, E. F., Hillier, J., and Prebus, A., electron supermicroscope at Toronto, I, 82. Contribution of the electron microscope to medicine, III, 369.
- Burton, J. F. See Cahill, W. M.
- Burton, J. O. See Hamer, W. J.
- Burton, M., calculation of bond strengths, I, 60. Bond length and bond strength, I, 431.
- Ricci, J. E., and Davis, T. W., free radicals in pyrolysis of acetaldehyde, II, 154.
- Taylor, H. A., and Davis, T. W., chain length and chain-ending processes in acetaldehyde decomposition, I, 120.
See also Davis, T. W., and Henkin, H.
- Burton, T. M., and Degering, E. F., preparation of acetyl bromide, II, 64.
- Buruiana, L., vitamin-C in milk of various animals, III, 430. Fibrinogenase, an enzyme in milk, III, 685.
- Burwash, E. M., occurrence of tinstone in the pre-Cambrian of Western Ontario, I, 182.
- Bury, C. R., Duhem-Margules equation and Raoult's law, I, 354.
- Busehinski, G. I., paleozoic phosphorites of Armenia, I, 304.
- Buser, F., treatment of pneumonia with M. & B. 693, III, 244.
- Bush, M. T., and Butler, T. C., metabolic fate of *N*-substituted derivatives of barbital, III, 328.
See also Butler, T. C.
- Bushby, S. R. M., Hart, E. W., Kekwick, A., and Whithy, L. E. H., urinary suppression after intravascular haemolysis, III, 469.
- Bushra, E., and Johnson, C. H., racemisation of optically active co-ordination compounds; application of the Arrhenius equation, I, 77.
- Businco, L., blood-histamine and histaminolysis in Quincke's disease, III, 381. Experimental rickets due to administration of beryllium carbonate, III, 430.
- Bussa, D. See Galli, T.
- Bussabarger, R. A., study of intestinal function, III, 134.
- Ivy, A. C., Wigodsky, H. S., and Gunn, F. D., effect of gastrectomy on monkey, III, 414.
See also Wigodsky, H. S.
- Bussell, L. J., relation of atropine to adrenaline and the sympathetic system, III, 679.
- Buswell, A. M., Downing, J. R., and Rodebush, W. H., infra-red absorption studies. IX. Bonding of hydrogen in nitrogen compounds, I, 94.
- Dunlop, E. C., Rodebush, W. H., and Swartz, J. B., change of the ultra-violet absorption spectrum of acetaldehyde with time, I, 192.
- Gore, R. C., and Rodebush, W. H., effect of ions of lyotropic series on the infra-red absorption spectrum of water, I, 94.
- Maycock, R. L., and Rodebush, W. H., infra-red absorption studies. X. Infra-red absorption of hydrogen fluoride in the vapour state and in solution in an inert solvent, I, 282.
- Butcher, E. O., effect of adrenalectomy on growth of mammary glands in underfed albino rats, III, 409. Effects of irritants and thyroxine on hair growths in albino rats, III, 894.
and Richards, R. A., relation of adrenals to retarded hair growth in underfed albino rats, III, 210.
- Butenandt, A., and Gallagher, T. F., experimental connexion of the vegetable heart poisons with the oestrone group, II, 95.
- Butenandt, A., and Schmidt-Thomé, J., $\Delta^8,^{16}$ -pregnadiene-3:20-diol, II, 84.
- Weidel, W., and Becker, Erich, kynurenine, an agent which causes eye pigment formation in insects, III, 572.
- Butler, A. M., and Cushman, M., distribution of ascorbic acid in blood and its nutritional significance, III, 594.
- Ross, R. A., and Talbot, N. B., probable adrenal insufficiency in infant, III, 410.
See also Shohl, A. T., and Talbot, N. B.
- Butler, E. C. B., surgery in diabetic patients, III, 327.
- Butler, E. H., jun., and Pugh, E. M., galvanic and thermo-magnetic phenomena in iron and nickel, I, 313.
- Butler, E. T., and Polanyi, M., influence of substitution on organic bond strength, II, 321.
- Butler, J. A. V. See Barclay, J. M.
- Butler, J. W., jun., detrital dihexahedral crystals of quartz in a sediment in Upper Magdalena Valley of Colombia, S. America, I, 238.
- Butler, R. E. See Sebrell, W. H.
- Butler, T. C., anaesthetic activity of optical antipodes. II. Arabinochloraloses, III, 823.
and Bush, M. T., metabolic fate of 1-methyl-5-allyl-5-isopropylbarbituric acid (narconumal), III, 823.
and Dickison, H. L., anaesthetic activity of optical antipodes. I. *sec*-Butyl alcohols, III, 823.
See also Bush, M. T.
- Butlin, K. R., and Wince, W. H. D., biological production of gluconic acid, III, 167. [Biological] formation of acetol from α -propylene glycol, III, 167.
- Butt, H. R., Snell, A. M., and Osterberg, A. E., vitamin-K in jaundice, III, 40.* Therapeutic effect of phthiocol in treatment of hypoproteinaemia associated with jaundice, III, 789.
- Snell, A. M., Osterberg, A. E., and Bollman, J. L., use of various synthetic compounds exhibiting antihæmorrhagic activity, III, 790.
See also Sheldon, C. H. Snell, A. M., and Wilder, R. M.
- Butter, A. J. M., epaunutin in epilepsy, III, 524.
- Butterworth, E. C., Heilbron, I. M., and Hey, D. H., arylpyridines. II. Substituted phenylpyridines, II, 188.
and Hey, D. H., nuclear alkylation of aromatic bases. IV. Action of *n*-dodecyl alcohol on α - and β -naphthylamine hydrochlorides, II, 164.
See also Haworth, J. W.
- Buttiaux, R. See Sevin, A.
- Buttle, G. A. H., action of sulphanilamide and its derivatives with special reference to tropical diseases, III, 438.
- Butts, J. S. See Deuel, H. J., jun.
- Butturini, L. See De Caro, L.
- Butz, E. W. J., preparation of 1:5-dimethylnaphthalene, II, 369.
See also Butz, L. W.
- Butz, L. W., Butz, E. W. J., and Gaddis, A. M., synthesis of condensed ring compounds. II. Reaction of $\Delta^{\alpha\gamma\epsilon}$ -hexatriene with 1:4-naphthaquinone, II, 182.
- Gaddis, A. M., Butz, E. W. J., and Davis, R. E., total synthesis of a non-benzenoid steroid, II, 221. Synthesis of condensed ring compounds. III. Hexahydronaphthalene derivative from a dieneine, II, 326.

- Butzik, M. G. See Gertzriken, S. D.
 Buxton, C. L., and Engle, E. T., clinical use of stilbæstrol, III, 655.
 See also Westphal, U.
 Buxton, L. H., Trevor, F. C., and Blackwood, B., measurements of Oxfordshire villagers, III, 87.
 Buxton, L. O., and Kapp, R., purification of fatty esters of high mol. wt., II, 202.
 Buxton, P. A., temperatures lethal to louse, III, 529.
 Buxton, R. See Harman, N. B.
 Buzágh, A. von, structure of the adsorption layer and adhesion of microscopic particles, I, 22.
 Bychkov, S. M. See Braunstein, A. E.
 Byers, D. J. See Koelsch, C. F.
 Byers, H. G., and Lakin, H. W., selenium in Canada, I, 45.
 Byers, W. H., and Bless, A. A., polar moment of cellosolves, I, 351.
 Byman, L. See Bonnell, W. S.
 Byrne, J. B. See O'Brien, S. J.
 Byrne, J. M. See Mattice, M. R.
 Byron, C. S. See Wishnofsky, M.
- C.
- Cabannes, J., and Aynard, R., conditions for excitation of the nitrogen spectrum at high altitudes, I, 49.
 and Roussel, A., Raman effect in gases at atmospheric pressure. I., I, 346.
 Cabot, S., Shear, N., Shear, M. J., and Ferrault, A., development of skin tumours in mice painted with 3:4-benzpyrene and creosote oil fractions, III, 853.
 Cabrera, B., paramagnetism of the rare earths, I, 64.
 Cabrera-Malo, R., suppression and reversal of effects of vagal stimulation produced by active substance of heart, III, 190.
 Cacciapuoti, N. B. See Ageno, M.
 Cadden, J. F. See Dill, L. V.
 Cade, G. N., jun. See Townsend, F. E.
 Cade, S., MacLagan, N. F., and Townsend, R. F., serum-phosphatase in bone tumours, III, 791.
 Cadle, R. D. See Tartar, H. V.
 Cady, G. H. See Secoy, C. H.
 Cady, J. R. See Crook, W. J.
 Caffey, J., and Sehlesinger, E. R., effects of hemophilia on growing skeleton, III, 706.
 Cagliolo, F. R., polypeptides in blood during experimental obstruction of bile duct and following removal of obstruction, III, 312.
 Caglioti, V., chemical and structural properties of aluminium fluoride and double salts derived from it, I, 228.
 and Milazzo, G., reactivity of α and γ varieties of ferric oxide, I, 230.
 Cagnoli, (Signa.) N. See Bellavita, V.
 Cahane, M., effect of adrenalectomy on sodium and chloride content of kidney, III, 410.
 Cahen, R., effect of insulin on chronaxie of snail's foot, III, 20.
 and Ardoin, P., determination of gonadotropic activity of anterior pituitary extracts, III, 302.
 See also Faure-Beaulieu, M., and Tiffeneau, M.
 Cahill, G. F. See Brand, E.
 Cabill, W. M., and Burton, I. F., racemisation of amino-acids and depeptides on acetylation with keton, II, 121.
 See also Gordon, W. G.
- Caillère, (Mlle.) S., and Hénin, S., differential thermal analysis of kaolinite, I, 86.
 Cain, C. K., and Wiselogle, F. Y., bivalent nitrogen. I. Rate of dissociation of tetraphenylhydrazine, I, 325.
 See also Adams, R.
 Cairns, H., and Muskett, A. E., *Phytophthora erythroseptica*, Pethybr., in relation to its environment, III, 777.
 Calandra, A., approximate solutions to problems involving the ideal gas law, I, 154.
 Calas, R., camphorone and pulegone; hydrogenation products and their structure. IV. Hydrogenation in presence of metallic catalysts. V. *cis*- and *trans*-Dihydrocamphorones. VI. Hydrogenation of dihydrocamphorones. VII. Dehydration of dihydrocamphorols, II, 97.
 Calcagni, G., photo-oxidation of sulphides, I, 298. Photochemical analysis, I, 298.
 Calcinaï, M., extract fractions precipitated by trichloroacetic acid during primary autolysis of liver, III, 40. Studying tissue dehydrogenase activity, III, 70. Changes in trichloroacetic acid precipitates of protein fission products by hydrogen peroxide, III, 72. Effect of hydrogen peroxide on products of autolysis of bacteria and leucocytes, III, 269. Determination of H-donors and of dehydrogenases in bacterial or tissue substrates, III, 608.
 Calder, D. C. See Riegel, C.
 Calder, R. M., modification of Huddleson's opsonocytophagic reaction, III, 559.
 Calderón, E. A., and Pérez, H., azomethine derivatives of 2-nitro- and 2:5- and 2:7-dinitro-fluorene, II, 281.
 Caldwell, C. C., and Le Fèvre, R. J. W., skew structure of benzil, I, 10.
 Caldwell, D. W. See Gomori, G.
 Caldwell, W. T., deoxycholate, II, 84.
 and Kime, H. B., synthesis of isocytosine, II, 382.
 Calémbert, L., waters from the calcaireous massif of the Ouarsenis (Algeria), I, 303.
 Caley, E. R., and Baker, W. O., composition of lithium and potassium salts precipitated by uranyl acetate reagents for sodium, I, 80.
 Calfee, J. D., Fukuhara, N., and Bigelow, L. A., action of fluorine on organic compounds. VI. Vapour-phase reaction between ethane and fluorine in progressively varying proportions, II, 62.
 Fukuhara, N., Young, De W. S., and Bigelow, L. A., action of fluorine on organic compounds. VII. Vapour-phase fluorination of ethyl chloride, II, 147.
 Califano, L., and Kertesz, D., mechanism of enzymic oxidation of monohydric phenols, III, 685.
 California, Department of Public Health, CO hazard in relation to California highway accidents, III, 341.
 Calingaert, G., laboratory lifting device, I, 42. Vapour-proof laboratory stirrer, I, 177.
 and Beatty, H. A., redistribution reaction. I. Random intermolecular exchange of organic radicals, II, 8.
 Beatty, H. A., and Hess, L., redistribution reaction. IV. Interchange between lead triethyl chloride and radio-active lead tetraethyl, II, 72.
- Calingaert, G., Beatty, H. A., and Neal, H. R., redistribution reaction. II. Analysis of metal alkyl mixtures; confirmation of random distribution, II, 8.
 Beatty, H. A., and Soroos, H., redistribution reaction. V. PbR₄ compounds, II, 269.
 and Soroos, H., redistribution reaction. III. Determination of a material balance, II, 8.
 Soroos, H., and Hnizda, V., redistribution reaction. VII. Alkyl compounds of mercury, tin, silicon, and zinc, II, 269.
 Soroos, H., Hnizda, V., and Shapiro, H., redistribution reaction. IX. Redistribution of halides and esters, II, 295.
 Soroos, H., and Shapiro, H., redistribution reaction. VI. Lead alkyl halides, II, 269.
 Soroos, H., and Thomson, G. W., redistribution reaction. VIII. Relative affinity of mercury and lead for methyl and ethyl radicals, II, 300.
 Callaghan, E., geology of the Searchlight district, Clark County, Nevada, I, 333.
 and Thomas, H. E., manganese in a thermal spring in West-Central Utah, I, 178.
 Callanan, M. E. See Lee, C. E.
 Callaway, J. L., passive transfer of light-sensitivity, III, 684.
 and Noojin, R. O., influence of diets of varying fat content on experimentally produced cutaneous infections in white rats, III, 591. Influence of various fat-containing diets on reaction to histamine acid phosphate in skin of white rats, III, 680.
 Callegari, L., thiochrome method for determining vitamin-B₁, III, 51. Vitamin-B₁ content and antineuritic activity. I. Sunflower seeds. II. Fruit of *Rosa canina*, III, 51. Relationship between vitamin content and hypoglycæmic activity of *Rosa canina*, III, 440. Application of electrodialysis to toxicology. I. Separation of copper, III, 444.
 Callendar, L. H., formation of protective films, I, 421.
 Callison, E. C. See Booher, L. E.
 Callodon, V. B., treatment of pneumonia with type-specific immune rabbit serum, III, 247.
 Callow, N. H., and Callow, R. K., excretion of androgens by eunuchs: isolation of 17-ketosteroids from urine, III, 646.
 Callow, R. K., and Emmens, C. W., effect of administration of testosterone propionate on urinary excretion of compounds allied to steroid hormones, III, 32.
 Callow, R. K. See Callow, N. H., and Crooke, A. C.
 Calvin, D. B., Decherd, G. M., and Herrmann, G., response of plasma volume to diuretics, III, 839. Plasma-protein shifts during diuresis, III, 839.
 Calvin, M., Kodani, M., and Goldschmidt, R., chemical effects on chromosome morphology, III, 626.
 Cambel, P., Hamdi's preserving solution, III, 698.
 Cambi, L., and Malatesta, L., cobalt salts of glyoximes. V., II, 46.
 Camerer, J. W., action of prontosil album and M. & B. 693 in epidemic meningitis, III, 243.
 Camerini, R., effect of X-rays on blood-cerebrospinal fluid barrier, III, 395.

- Camerini, R., and Guardabassi, L., effect of inflammatory factor on degree of sensitivity and neoplasm to X-irradiation, III, 865.
- Camerman, J. See Maisin, J.
- Cameron, D. E. See Remp, D. G.
- Cameron, D. M., Sears, W. C., and Nielsen, H. H., infra-red absorption by hydrogen selenide, and di- and monodeuterium selenide, I, 8.
- See also Sears, W. C.
- Cameron, E. N., geology and mineralisation of the north-eastern Humboldt Range, Nevada, I, 47.
- Cameron, F. K. See Burdett, P. H.
- Cameron, G. R., and Doniger, C. R., toxicity of indene, III, 66.
- Cameron, H. S. See Hughes, E. H.
- Cameron, J. A., recovery of carbon monoxide-poisoned rats after X-ray treatment, III, 105. Effect of fluorine on hatching time and hatching stage in *Rana pipiens*, III, 808.
- Camia, M. See Beretta, A.
- Camp, C. D. See Sander, J. F.
- Campbell, A. J. R. See Campbell, A. N.
- Campbell, A. N., and Campbell, A. J. R., heats of solution, heats of formation, specific heats, and equilibrium diagrams of certain molecular compounds, I, 218.
- Campbell, B., integration of locomotor behaviour patterns of hagfish, III, 801.
- Campbell, C. R. See Oard, H. C.
- Campbell, D. H., effect of sex hormones on normal resistance of rats to *Cysticercus crassicolis*, III, 130.
- See also Lennette, E. H.
- Campbell, E., and Schwind, J. L., goblet cells in colloid cyst of the third ventricle, III, 113.
- See also Schube, P. G.
- Campbell, E. C., nuclear K-electron capture and negative β -emission, I, 185.
- Campbell, F. H., flame testing [for heavy metals], I, 132.
- Campbell, H., and Eley, D. D., energy and entropy of liquid surfaces, I, 348.
- Campbell, J. See Best, C. H.
- Campbell, J. A., last thousand feet on Everest: possible bacterial factor, III, 18. Low oxygen pressure and lung tumours, III, 478.
- Campbell, K. H. See Richter, C. P.
- Campbell, K. N., and Eby, L. T., substituted acetylenes and their derivatives. XL. Preparation of *tert.* acetylenes, II, 295.
- and O'Connor, M. J., hydrogenation of substituted acetylenes with Raney nickel, II, 2.
- Campbell, N., Anderson, W., and Gilmore, J., structure of aromatic compounds. II. III. Action of acetyl chloride on magnesium α - and β -naphthylmethyl halides, II, 247, 271.
- Campbell, N. R., Dodds, E. C., and Lawson, W., oestrogenic substances produced during demethylation of anethole, II, 79.
- Campbell, S. B. B., and Allison, R. S., pellagra, polyneuritis, and beri-beri heart, III, 673.
- Campbell, W. G., sympathetic nervous system and segmental pain, III, 110.
- Campbell, W. P., and Todd, D., acetylretene and reten-6-ol, II, 279.
- See also Fieser, L. F.
- Campbell, W. R., Graham, R. R., and Robinson, W. L., islet cell tumours of the pancreas, III, 304.
- Campbell, W. W., and Greenberg, D. M., calcium metabolism with aid of its induced radioactive isotope, III, 435.
- See also Greenberg, D. M.
- Canaga, B., jun. See Scott, G. H.
- Canavan, M. M., Simmonds' disease (pituitary cachexia) in aged man with dementia praecox, III, 577.
- Candel-Vila, R., and Cantarel, R., isomerism of the Schiff bases benzylidenebenzhydramine and benzhydridenebenzylamine, I, 288.
- Candella, P. B., serology of anthropoid apes, III, 876.
- Candon, B. H. See Dunihue, F. W.
- Canetti, G. See Saenz, A.
- Canevazzi, O., fate of glucose injected into developing hen's eggs, III, 875.
- Canfield, N., labyrinthine fistulas; vital response to various methods of producing defects in bone, III, 27.
- Canizares, O., and Thomas, E. W., early acute arsenical erythemas; study of 11 cases of the "erythema of the ninth day" of Milian, III, 155.
- See also Decker, D. A., and Thomas, E. W.
- Cannavà, A., behaviour of metallic powders in body. I. Histological research and determination of copper, cobalt, and nickel in organs. II. Excretion and effect on white-cell count of copper, cobalt, and nickel. III. Histological research and effects on white-cell count of silver, aluminium, and zinc, III, 64. Granulopexic activity of reticulo-endothelial system, III, 790.
- and Musumeci, S., effect of ergotamine [and other drugs on cerebrospinal fluid pressure], III, 487.
- Cannavò, L., and Ortoleva, G., hypoglycaemia and antidiabetic effect of citric acid, III, 381.
- Canneyt, J. van, unilateral microphthalmia with coloboma of the choroid on the other side (second case in one family), III, 396.
- Cannon, A. B., allergic dermatitis simulating lymphoblastoma, III, 157.
- Cannon, C. V. See Wheeler, J. A.
- Cannon, E. F., Lucia, S. P., and Benson, E. H., circulation time under conditions of work and rest in subjects with normal and abnormal hearts, III, 99.
- Cannon, M. D., failure of maternal vitamin-A depletion to produce congenital anomalies in the young of rats, III, 749.
- and Emerson, Gladys A., dietary requirements of the guinea-pig: need for a special factor, III, 323.
- Cannon, P. R., functional significance of specific agglutinins and precipitins, III, 187.
- Cannon, W. A., oxygen relations in hydrophytes, III, 459.
- Cannon, W. B., law of denervation, III, 198. The argument for chemical mediation of nerve impulses, III, 298. Control of hepatic glycogenolysis, III, 312.
- See also Friedgood, H. B.
- Cano, H., Krueger's method of counting bacteria; non-applicability to bacteriophage studies, III, 773.
- See also Chodat, F.
- Cantarel, R., Raman spectrum of substituted ketimines; isomerism of these bases, I, 244. Preparation of substituted ketimines, II, 225.
- See also Candel-Vila, R.
- Cantarow, A., urine-chloride concentration in patients with Cushing's syndrome, III, 402.
- and Haury, V. G., diffusion of calcium, magnesium, and phosphorus into peritoneum; effect of intravenously injected calcium salts and of parathyroid hormone, III, 123.
- and Rakoff, A. E., influence of deoxycorticosterone acetate and of progesterone on diffusion of sodium and chloride into peritoneal space, III, 897.
- See also Haury, V. G.
- Cantin, L. See Gagnon, P. E.
- Cantoni, A. G., pharmacology of *Cupressus sempervirens*, L., III, 440. Pharmacology of *Verbascum thapsiforme* and *Urtica dioica*, III, 444.
- Cantor, S. M., and Peniston, Q. P., reduction of aldoses at the dropping mercury cathode; determination of the aldehydo-form in aqueous solutions, II, 364.
- Canzanelli, A., Greenblatt, M., Rogers, G. A., and Rapport, D., effect of pH-changes on *in-vitro* oxygen consumption of tissues, III, 237.
- Guild, R., and Rapport, D., effect of thyroglobulin and thyroxine on oxygen consumption of tissues *in vitro*, III, 208.
- and Rapport, D., oxygen consumption of guinea-pig tissues, III, 237.
- Canzani, R. See Varela-Fuentes, B.
- Capizzano, N., Valotta, J., and Megy, F. R., endemic fluorosis in Argentina, III, 527.
- Cappel, L. See Haam, E. von.
- Cappel, N. O., and Fernelius, W. C., reduction of 1:2:3-benzotriazole and its 1-methyl derivatives by sodium in liquid ammonia, II, 141.
- Cappel, K. H. See Essen, K. W.
- Capraro, V., histology of testis of *Columba domestica* in normal and pathological conditions (starvation and beriberi), III, 33. Lesions of nervous system in pigeons with beriberi, III, 51. Energy metabolism of *Carcinus maenas* in relation to osmotic pressure and temperature of environment, III, 746.
- and Fornaroli, P., lactic acid metabolism in developing hen's egg, III, 58. Difference of potential between white and yolk of hen's egg, III, 69.
- and Gualtierotti, T., electro-physiological relationship between cerebrum and cerebellum, III, 843.
- and Milla, E., utilisation of pyruvic acid in eviscerated dogs, III, 58.
- See also Fornaroli, P., Gualtierotti, T., and Milla, E.
- Capri, A., effects of direct application of histamine on cerebral cortex, III, 720.
- Capron, L. See Emile-Weil, P.
- Capron, P. C. See Rajam, J. B.
- Capsoni, M. T., biological control of anti-anemic liver preparations, III, 90.
- Carangiu, O. See Paunescu-Podeanu, A.
- Carayon-Gentil, A., Florence reaction; nature of "inhibitory substance" [in blood], III, 562.
- Carbone, D., and Alexandri, A. V., vaccination of plants, III, 273. Properties of anti-botryosporium disease vaccine, III, 273. Toxicity of vaccine in plants, III, 273.
- Carcamo, V. See Deulofeu, V.
- Card, J. F. See Klucher, G. V.
- Card, W. I., Smith, J. F., Griffiths, W. J., McSwiney, B. A., and Savage, B., B.L.B. mask for administering oxygen, III, 478.

- Cardin, A., phrenic nerve and diaphragm, III, 17. Effect of calcium ions on isolated mammalian ovary, III, 739. Response of fresh and fatigued intestine preparations to calcium ions, III, 741. Effect of nicotinic acid on smooth muscle, III, 762.
- Cardot, H. See Arvanitaki, A.
- Cardwell, E. S., jun. See Andrew, W.
- Carey, B. W., and Cooley, T. B., [treatment of] pneumonia in infants and children, III, 243.
- and Wilson, J. L., methemoglobinemia following sulphanilamide and sulphapyridine therapy in infants and children, III, 921.
- Carey, E. J., wave mechanics of smooth muscle action. XV. Experimental multiple reflexions between intestinal ligatures transform travelling into stationary micro-pressure waves in smooth muscle, III, 501. Liesegang and muscle pressure waves, III, 507.
- Carey, J. B., gastroscopic observations in chronic gastritis, III, 663.
- Carington, W. W., and Soal, S. G., experiments in non-sensory cognition, III, 485.
- Carlen, S. A., and Katz, L. N., ventricular rate in faradically maintained auricular fibrillation: an index of auriculo-ventricular conductivity, III, 190.
- Carles, J., effect of climate on chemistry of Puy-lentils, III, 360.
- Carleton, H. M., and Leach, E. H., flattening out paraffin sections, III, 374.
- Carlson, A. J., eating of bone by pregnant and lactating grey squirrel, III, 809.
- Carlson, G. H. See Michael, A.
- Carlson, J. F., energy losses of Pauli-Weisskopf particles, I, 341.
- Carlson, J. G., immediate effects of 250 r. of X-rays on different stages of mitosis in neuroblasts of grasshopper, III, 875.
- Carlson, L. D., and Bodine, J. H., action of stimulating and inhibiting substances on respiration of grasshopper embryo, III, 237.
- See also Bodine, J. H.
- Carlson, P. R. See Barkas, W. H.
- Carlström, B., and Hjärre, A., deficiency diseases in military horses caused by avitaminosis-B, III, 914.
- and Jonsson, G., avitaminosis-B₁ in guinea-pigs, III, 914.
- Myrbäck, K., Holm, N., and Larsson, A., biochemical studies on B₁-avitaminosis in animals and man, III, 232.
- Carlton, M. See Winter, E. R. S.
- Carlyle, E. C. See Fraps, G. S.
- Carman, P. C., constitution of colloidal silica, I, 410.
- Carmichael, E. B. See Fidler, H. K.
- Carmichael, H. See Bhabha, H. J.
- Carnahan, H. D. See Piness, G.
- Carne, H. O. See MacKay, E. M.
- Carneiro, G. G., factors affecting milk production of Simmenthaler grade cows under the pen keeping system, III, 128.
- Carnes, W. H., and Biskins, G. R., effect of testosterone propionate on development of tuberculosis in immature male guinea-pig, III, 902.
- Carney, J. J. See Tomsicek, W. J.
- Carney, T. P. See Whitmore, F. C.
- Carobbi, G., Appennine sandstones, I, 239.
- Caronna, G., and Sansone, B., oxidation of hydrazoic acid with concentrated nitric acid, I, 127. Action of diazomethane on zinc chloride [in ether], II, 158.
- Carpenter, C. C. See Easom, H. F.
- Carpenter, C. M., and Barbour, G. M., inactivation of toxins *in vitro* by sulphanilamide, III, 59.
- See also Boak, R. A.
- Carpenter, D. C., splitting the CO-NH linkage by means of ultra-violet light, I, 226.
- Carpenter, T. M., combustion of carbohydrates in man after ingestion of common foods, III, 856.
- and Steggerda, M., food of present-day Navajo Indians of New Mexico and Arizona, III, 318.
- Carr, C. J. See Krantz, J. C., jun., and Kunkel, A. M.
- Carr, (Miss) E. P., and Stücklen, (Miss) H., extreme ultra-violet absorption spectra of simple hydrocarbons, I, 310.
- Carr, H. A., treatment of acute attacks of bronchial asthma by intravenous injection of aminophyllin, III, 887.
- Carr, J. G. See Amies, C. R.
- Carrara, G., and Monzini, G., sulphonamides and mechanism of their [physiological] action, II, 274.
- Carrel, A. See Baker, L. E., and Foot, N. C.
- Carrelli, A., partial and total emissive power of substances. III. and IV., I, 17, 94.
- Carrick, R. See Bullough, W. S.
- Carrié, C., excretion of porphyrin in dermatoses, III, 917.
- and Schnettler, O., prevention of X-ray leucopenia, III, 469.
- Carrington, H. C., Haworth, W. N., Hirst, E. L., and Stacey, M., polysaccharides. XXXV. Hydrocellulose, II, 37.
- Carrodus, A., and Bolliger, A., effect of oestrogenic hormone on prostate of marsupial *Trichosurus vulpecula*, III, 849.
- See also Bolliger, A.
- Carroll, (Miss) D. See Higgins, H. G.
- Carroll, H., Powers, P. N., Beyer, H. G., and Dunning, J. R., scattering of neutrons by gases, I, 337.
- See also Beyer, H. G.
- Carroll, K. G., binding energy of ⁷Li, I, 280.
- Carroll, M. F., addition of αβ-unsaturated alcohols to the active methylene group. I. Action of ethyl acetoacetate on linalool and geraniol. II. Action of ethyl acetoacetate on cinnamyl alcohol and phenylvinylcarbinol, II, 266, 347.
- Carroll, M. J., difference in response of normal and tumour tissue, III, 141.
- Carruthers, C., aldehydic resorption [of fetuses] in mice, III, 127. Influence of aldehydes on transplanted tumours, III, 747.
- Carson, S. C. See Bailey, C. R.
- Carson, S. F., and Ruben, S., assimilation of carbon dioxide by propionic acid bacteria determined by use of radioactive carbon, III, 934.
- Carten, F. H. See Huntress, E. H.
- Carter, A. H., and Weiss, J., transfer of excitation energy from uranium ions in solution, I, 226.
- Carter, C. W., and O'Brien, J. R., maintenance nutrition in the pigeon; presence of dietary essentials in yeast and liver and their relationship to vitamin-B₆, III, 52.
- Carter, E. See Ginnings, P. M.
- Carter, E. B. See Barthen, C. L.
- Carter, F. D., Simonsen, J. L., and Williams, H. O., constituents of Indian essential oils. XXVII. Synthesis of *dl*-α-curcumene, II, 210.
- Carter, G. S., Gatty, O., Schulman, J. H., and Walston, H., calcium in ciliary and muscular movement, III, 336.
- Carter, H. B., variations in follicle population density in the Merino skin, III, 43.
- See also Wildman, A. B.
- Carter, H. E., *p*-phenylphenacyl esters, II, 348.
- and Handler, P., metabolism of *N*-alkyl derivatives of amino-acids, III, 56.
- and Melville, D. B., synthesis and determination of the lipotropic activity of the betaine hydrochlorides of *dl*-serine, *dl*-threonine, and *dl*-allothreonine, II, 157.
- and Stevens, C. M., azlactones. II. Azlactone formation in glacial and in aqueous acetic acid and preparation of α-benzamidocrotonic acid azlactone II, II, 172.
- Carter, P. W., Heilbron, I. M., and Lythgoe, B., lipochromes and sterols of the algal classes, III, 694.
- Carter, R. F., and Collins, H. L., anomalies of the bile ducts, III, 2.
- See also Bruger, M.
- Carter, R. O., and Hall, J. L., physical chemistry of nucleoproteins. I. Preparation and general properties, II, 317.
- Carter, W., prontosil as a vital dye for insects and plants, III, 274.
- Cartiaux, J., determination of organic nitrogen, II, 240.
- Cartland, G. F. See Kuizenga, M. H.
- Carton, B., jun. See Nightingale, (Miss) D.
- Caruso, C. See Savelli, R.
- Caruso, E. See Malquori, G.
- Carver, L. F., irradiation in lymphomatoid diseases, III, 790.
- Cary, W. H., artificial impregnation, III, 809.
- Casabona, U., and Cavazzini, M., histology of ovaries of rabbits irradiated with short and long wave-lengths, III, 650.
- Casamajor, L., and Laidlaw, R. W., convulsive states with evidence of brain hemiatrophy, III, 24.
- Casanova, G., pharmacology of henna, III, 924.
- Casberg, M. A., acute pancreatic necrosis and acute interstitial pancreatitis, III, 664.
- Case, F. H., oxidation of heteronuclear-substituted polybromodiphenyls, II, 76.
- Case, J. T. See Hutton, J. H.
- Case, T. J. See Perlman, H. B.
- Casey, A. E., effect of rabbit adenocarcinoma material on Brown-Pearce rabbit epithelioma, III, 423.
- and Moragues-Gonzales, V., inactivation by heat of material from Brown-Pearce rabbit tumour, III, 423.
- Cash, J. R. See Wood, J. E., jun.
- Cash, R. V. See Billman, J. H.
- Cashman, R. J., and Bassoe, F., experimental and theoretical photo-electric spectral sensitivity of strontium and magnesium, I, 335.
- Casida, L. E. See Nalbandov, A.
- Casier, H. See Handovsky, H.
- Casimir, H. B. G., ortho-para conversion of deuterium and electric quadrupole moment of the deuteron, I, 220.
- and De Haas, W. J., determination of thermodynamic scale of temperature below 1° K. by means of magnetic measurements, I, 118.
- Casimir-Jonker, J. M. See De Haas, W. J.
- Cason, J. See Fieser, L. F.
- Caspar, S. See Havens, W. P.

- Casper, W. A., degeneration and variation of gonococci, III, 935.
- Casperson, T., methods for determination of absorption spectra of cell structures, III, 837.
- and Schultz, J., ribonucleic acids in both nucleus and cytoplasm; function of nucleolus, III, 853.
- Cass, A. B., and Reeves, D. L., partial agenesis of corpus callosum, III, 637.
- Cassaday, J. T., and Bogert, M. T., synthesis of 1:4-dimethylphenanthrenes structurally related to morphol, II, 13.
- Application of the Pschorr reaction to *p*-xylylene-2:5-di-(6-aminoveratrylideneacetic acid); synthesis of 9:10-dimethyl-1:2:5:6-di-(3':4'-dimethoxybenzyl)anthracene, II, 13.
- Cassen, B., rapid determination of magnesium in body fluids; results on clinical material, III, 550.
- Cassens, A., action of vitamin-D₃ on hibernation of hedgehogs, III, 325.
- Cassidy, (Miss) M. C. See Booth, H. S.
- Castagnou, R. See Aubertin, E., and Lacoste, A.
- Castaldi, L., nature of ovarian granuloma, III, 120.
- Castell, C. H., and Garrard, E. H., action of micro-organisms on fat. II. Uninoculated globules of triglycerides, fatty acids, and butter fat in an agar medium, 868.
- Castelluccio, D., theory of electrical equilibrium of electrolytic conductors, I, 74.
- Casten, V. G., isolated congenital absence of the inferior rectus muscle, III, 802.
- Castex, M. R., Molino, J. F., and Ruiz Moreno, G., allergenic flora in Argentine Republic; *Parthenium hysterophorus*, L., III, 871.
- Castille, A., oil from seeds of *Ongokea klainiana*, Pierre, II, 65.
- Castle, E. S., discontinuous growth of single plant cells measured at short intervals, and theory of intussusception, III, 775.
- Castle, W. E., testing linkage between lethal genes, III, 373.
- Castrodale, D. See MacBryde, C. M.
- Catala, R., acceleration of metamorphosis of caterpillars of *Chrysidia madagascariensis*, Cram. (Uranidae), by electric shocks, III, 835.
- Cataline, E. L. See Powers, J. L.
- Catchpole, I. R., and Fulton, J. F., tarsiers in captivity, III, 125.
- Cate, J. ten, rhythmic activity of spinal cord in sharks, III, 392. Conditioned reflexes are not exclusively a function of cortex, III, 393. Movements of dogs after complete trans-section of spinal cord, III, 569.
- and Brandon, A., change of behaviour in a dog [adaptation after paraplegia], III, 392.
- Walter, W. G., and Koopman, L. J., electro-encephalography after removal of occipital cortex, III, 299.
- See also Rijnberk, G. van.
- Catheart, (Miss) E. B. See Emeleus, K. G.
- Catheart, E. P., mystery of alimentation, III, 509.
- Cathie, I. A. B., relative grading of primary and secondary carcinoma, III, 912.
- Cattaneo, C. See Dubos, R. J.
- Cattelain, E., β -alkylthiosemicarbazides, II, 38. Alkyl derivatives of *as*-sulphoxytriazines [5-keto-3-thion-2:3:4:5-tetrahydro-1:2:4-triazine], II, 194.
- Cattelain, E., and Gros, R., standardisation of organic combustion furnaces, II, 199.
- Cattell, M. See Gold, H., and Guttman, S. A.
- Cauchois, (Mlle.) Y., and Allais, (Mlle.) M. L., L emission and absorption spectra of thorium and its characteristic levels, I, 184.
- and Manescu, (Mlle.) I., [X-ray] absorption spectra and characteristic levels of iridium, platinum, and tungsten, I, 137.
- See also Hulubei, H.
- Cauer, H., decrease in amount of iodine in the air over Central Europe, its cause, and its importance in relation to iodine content of foodstuffs, I, 43.
- Causon, H. D., gonadotropic content of female rat pituitary in experimental precocious puberty, III, 403.
- Cavallaro, L., absorption of radio-waves and study of binary systems, I, 204.
- Cavalli, F., pharmacodynamic action of octyl derivatives. I. Effect on isolated guinea-pig's intestine, III, 63. Pharmacology of diethylaminoethyl diphenylacetate-phenylethylbarbiturate, III, 64. Ascorbic acid in experimental vanadium poisoning, III, 156.
- and Dellepiane, G. B., combined action of local anaesthetics, III, 525.
- and Occhialini, E., muscle imbibition in adrenalectomised frogs, III, 579.
- Cavalli, G., enzyme in parotid saliva capable of hydrolysing submaxillary mucin, III, 866.
- Cavazzana, P., internal sphincter of urinary bladder, III, 1.
- See also Ottaviani, G.
- Cavazzini, M., effect of dyes catalysing tissue oxidations on Fischer's phenomenon, III, 422. Effect of irradiation of testes by short and long waves, III, 648. Hydræmia following short-wave irradiation, III, 865.
- See also Casabona, U.
- Cave, A. J. E., and Haines, R. W., paranasal sinuses of anthropoid apes, III, 784.
- Cavinato, A., geological study of the Mandas sheet, 225° of the map of Italy, 1:100,000, I, 86.
- Cavka, V., effect of hyper- and hypoglycæmia on the intraocular tension, III, 489.
- Cawley, J. D. See Gray, E. Le B.
- Cayrol, P. See Genevois, F.
- Cazzola, D. See Guercio, F.
- Cecil, R. L., therapy of rheumatic fever, III, 761.
- Ceder, E. T. See Zon, L.
- Cederstrom, D. J., geology and artesian water resources of a portion of the Virginia coastal plain, I, 396.
- Cedrangolo, F., vitamin-B₁₂ and cocarboxylase in central nervous system, III, 717.
- and Adler, E., action of methylene-blue and porphyrin on apodehydrogenases, III, 344.
- Ceithaml, J. J. See Evans, J. S.
- Cennamo, F., spectral emission of nickel at various temperatures. II., I, 63. Temperature-dependence of the maximum emissive power of nickel. IV., I, 63. Absorption of iodine in its chief solvents, I, 65.
- Centnerszwer, M., velocity of solution and corrosion of metals, I, 223.
- Cera, B. See Martini, V.
- Cergua, S., and Samaan, A., cure of experimental renal hypertension, III, 476.
- Cerquiglini, S., rigor mortis after 2:4-dinitrophenol administration, III, 390.
- Césari, E., and Boquet, P., colourless venom of *Vipera aspis*, III, 140.
- Cesoni, G. See Rollier, M. A.
- Cestari, A., effect of intratracheal injection of dyes containing nitro-groups, III, 759.
- Chaborski, G. L., and Potamian, E., preparation, properties, and analysis of thiobasic mercury sulphate, I, 228.
- and Trifănescu, T., preparation, and qualitative and quantitative analysis of dithiobasic mercury dichromate, I, 228.
- Chabrolin, C., relation between the chemical nature of organic compounds and their selective toxicity for young pherogams, III, 366.
- Chadwick, C. S., induction of water drive in *Triturus viridescens* with anterior pituitary extract, III, 730.
- Chadwick, J., excited states in stable nuclei, I, 426.
- See also Powell, C. F.
- Chaffee, E. See Meyer, Karl.
- Chalkelis, A. S., rapid determination of water in biological material, III, 176.
- Chaikina, B. I., and Epelbaum, S. E., adenosinetriphosphoric acid content of the brain at various stages of embryonic and post-embryonic development, III, 112.
- Chaikoff, I. L., and Connor, C. L., production of cirrhosis of liver of normal dog by high-fat diets, III, 743.
- See also Entenman, C., Fries, B. A., Jones, H. B., Montgomery, M. L., and Perlman, I.
- Chain, E., and Duthie, E. S., mucolytic enzyme in testis extract, III, 347.
- See also Berenblim, I.
- Chaix, P., and Fromageot, C., effect of fluoride and iodoacetate on anaerobic and aerobic degradation of substrates by *Propionibacterium pentosaceum*, III, 354.
- See also Fromageot, C.
- Chakrabarty, N. K., and Mitra, S. K., thiophen derivatives. II., II, 380.
- Chakravarti, A. S., molar zero fluidity volumes of organic compounds, I, 315.
- and Prasad, B., viscosity and density of aqueous solutions of barium chloride, magnesium chloride, cobalt chloride, and nickel chloride at 35°, I, 66. Effect of hydrochloric acid on viscosity of barium and magnesium chloride solutions, I, 203. Viscosity of electrolytic mixtures in dilute solution, I, 203.
- Chakravarti, D., and Dutta, J., pyrono series; attempted oxidation of chromanones with selenium dioxide. I., II, 230.
- and Dutta, N., synthesis of coumarins from *o*-hydroxyaryl alkyl ketones, II, 258.
- and Majumdar, B., synthesis of coumarins from *o*-hydroxyaryl alkyl ketones. II. Formation of *o*-coumaric acids from *o*-hydroxyaldehydes, II, 50.
- Chakravarti, M., quantitative comparison of different analeptics, III, 64.
- and Tripod, J., acetylcholine, sympathomimetic substances, local anaesthetics, and perfused liver, III, 248.

- Chakravarty, K. M., catalytic formation of methane from carbon monoxide and hydrogen. VI. Poisoning by carbon deposition, I, 262.
- Chakravarty, P. N., and Wallis, E. S., partial synthesis of corticosterone. I, II, 179.
- See also Ladenburg, K.
- Chalezova, A. T. See Trifonov, N. A.
- Chalkley, L., [preparation of] organic mercury derivatives of basic triphenyl-methane dyes, II, 239.
- Challenger, F., and Gibson, G. M., substitution products of thiopheno-2':3'-3:2-thiophen, II, 187.
- See also Files, J. R.
- Challinor, S. W., Ives, J. C. J., and Rooyen, C. E. van, blood-grouping sera for emergency purposes, III, 94.
- See also Freeman, G. G.
- Challis, H. J. G. See Friend, J. N.
- Chalmers, B., crystal boundaries in tin, I, 246. Mechanical effects of inter-crystalline boundaries, I, 253.
- Chalmers, J. G., elimination of 3:4-benzopyrene from the rat, III, 597.
- Chalmers, J. N. M., lead content of human blood, III, 473.
- Chalonge, D., and Déjardin, G., continuous spectrum of *Go* type stars, I, 276.
- See also Arnulf, A., and Barbier, D.
- Chamberlain, E. E., turnip mosaic: extended host range and identity, III, 544.
- Chamberlain, E. K., cucumber virus (*Cucumis virus*, I, of Smith, 1937), III, 358.
- Chamberlain, F. L., Scudder, J., and Zwemer, R. L., electrocardiographic changes associated with experimental alterations in blood-potassium in cats, III, 290.
- Chamberlain, W. E., basilar impression (platybasia), III, 177.
- Chamberlin, D. T., and Perkin, H. J., level of ascorbic acid in blood and urine of patients with peptic ulcer, III, 36.
- Chambers, H. H., and King, Alexander, discontinuities in adsorption processes, I, 158.
- Chambers, R., and Zweifach, B. W., capillary endothelial cement in relation to permeability, III, 710.
- See also Grand, C. G.
- Chambers, W. H., Chandler, J. P., and Barker, S. B. [with Evenden, J.], metabolism of carbohydrate and protein during prolonged fasting, III, 149.
- Chamié, (Mlle.) C., and Marques, (Mme.) B. E., property of radio-colloids, I, 70.
- Chamorro, A., fractionation of extract of urine of castrated females, III, 402. Presence of anti-gonadotropic substance in urine of castrated females, III, 403.
- See also Lacassagne, A.
- Chamorro, T., and Etchevés, J. C., cardiac sounds after intravenous injection of ozone, III, 14.
- Champetier, G., and Boatner, C. H., Georges Urbain, I, 378.
- Champy, C., and Coujard, R., localisation and acceleration by cold of neuritis due to avitaminosis-B₁, III, 322.
- Chance, B., Harvey, E. N., Johnson, F., and Millikan, G., kinetics of bioluminescent flashes, III, 606.
- Chance, M. R. A., Rowlands, I. W., and Young, F. G., species variation in thyrotropic, gonadotropic, and prolactin activities of anterior hypophyseal tissue, III, 641.
- Chance, M. R. A. See also Macfie, J. M., and Madinaveitia, J.
- Chandlee, G. C. See Hayes, J. R.
- Chandler, F. B., and Mason, I. C., effect of growth-substances on rooting of blueberry cuttings, III, 776.
- Chandler, F. G., Harrison, G. A., and Rimington, C., clinical porphyria, III, 224.
- Chandler, J. P., and Du Vigneaud, V., comparative effect of choline and betaine in the replacement of methionine by homocysteine in the diet, III, 917.
- See also Chambers, W. H., and Du Vigneaud, V.
- Chandler, L. R. See Tiffin, M. E.
- Chandler, R. C., sensitive static vapour pressure apparatus, I, 332.
- Chandler, S. B., and Hughes, J. R., influence of repeated fasting on parathyroidectomised rat, III, 209.
- Chandra, S. N. See Grevall, S. D. S.
- Chaney, A. L., determination of iodine in blood, III, 473.
- Chang, C. T. See Wilson, S. D.
- Chang, C. Y., extraction of proteins from vegetable foodstuffs with alkali, III, 510. Analysis of "small cabbage" (*Brassica chinensis*, L.) and biological value of its proteins, III, 817.
- and Chen, T. T., parathyroid hypertrophy and hypocalcemia in vegetarian rats, III, 497.
- and Wu, H., isolation of total proteins from vegetable foods, III, 510. Occurrence of vitamin-D in fresh leafy vegetables, III, 820.
- Chang, H.-C., Hsieh, W., Lee, L., and Li, T., diminution of acetylcholine content of retina after prolonged functional disuse, III, 490.
- and Lü, Y. M., light-pituitary reflex. I. Pigmentary response, III, 114.
- Chang, I., and Yu, J. M., effect of some narcotics on glucose uptake of dog's brain, III, 863.
- See also Suh, T. H.
- Chang, K. J. See Hsing, C. Y.
- Chang, L., pharmacological action of cinnamon, III, 923.
- Chang, L. W. See Chow, T. T.
- Chang, P. C., and Adolph, W. H., Chinese celery cabbage. I. Carbohydrate, III, 817.
- Chang, T. H., and Yu, T. T., succinate oxidation by frog muscle poisoned with iodoacetate, III, 608.
- Chang, T.-L., and Chu, T. C., solubility of sodium chloride in mixtures of protium and deuterium oxide, I, 21.
- and Yü, W.-C., compounds of sulphates of bivalent heavy metals with quinoline, I, 125.
- Chang, T. S., azimuthal dependence of processes involving mesons, I, 91. Number of configurations of an assembly with long-distance order, I, 106.
- Chang, Y. C. See Suh, T. H.
- Changus, G. W. See Entenman, C., and Fries, B. A.
- Chanin, M. N., rôle of liver in circulatory disorders due to shock produced by blood transfusion, III, 92.
- Chanutin, A., and Ludewig, S., experimental renal insufficiency, III, 41. Experimental renal insufficiency produced by partial nephrectomy, III, 222. Effect of renal insufficiency on response of serum-calcium after administration of parathyroid hormone in rat, III, 806.
- Chanutin, A., and Ludewig, S. [with Minor, G. R.], distribution of body water and electrolytes in the intact and partly nephrectomised rat after dehydration, III, 139.
- See also Beckwith, J. R.
- Chao, H. C. See Chu, H. I.
- Chao, I., action of alkaline-earth chlorides on muscular contraction, III, 389. Osmotic properties of isolated amphibian skeletal muscle. III. Nature of chloride spaces. IV. Osmotic pressure of toad's plasma, III, 389.
- Chao, K. T. See Crane, H. R.
- Chao, S. H., Hargreaves, A., and Taylor, W. H., structure of orthoclase, I, 239.
- and Taylor, W. H., lamellar structure of potash-soda feldspars, I, 238. Isomorphous replacement and superlattice structures in plagioclase feldspars, I, 422.
- Chao, T. H. See Kharasch, M. S.
- Chao, Y., Humphreys, S., and Penfield, W., preventing adhesions, III, 504.
- Chapin, R. M., Powick, W. C., McBryde, C. N., and Cole, C. G., influence of pH on survival of hog cholera virus in defibrinated blood, III, 690.
- Chapman, A. See Wells, B. B.
- Chapman, C. W., comparison of one- and eighteen-hour frog method of assay of digitalis, III, 923.
- Chapman, G. H., and Stiles, M. H., carbohydrate fermentation reactions of staphylococci, III, 827.
- Chapman, S., atmospheric sodium, I, 49. Dependence of thermal diffusion on the concentration ratio, I, 436.
- Chapple, C. C., cabinet cubicle for infants, combining isolation with control of temperature and humidity, III, 529.
- Chapple, E. D., and Harding, C. F., simultaneous measures of human relations and emotional activity, III, 722.
- Charaux, C., and Rabaté, J., orobol, II, 102. *Centaurea scabiosa*, L., II, 155.
- Charbonnier, H. Y. See Allen, N.
- Chardon, G. See Tournade, A.
- Chardonnens, L., and Heinrich, P., functional aptitude of the methyl group. V. Nitro- and dinitro-toluenes. VI. Halogenonitrotoluenes, II, 16, 180.
- Chargaff, E., and Keston, A. S., metabolism of aminoethylphosphoric acid followed by means of the radioactive phosphorus isotope, III, 753.
- Olson, K. B., and Partington, P. F., formation of phosphatides in the organism under normal and pathological conditions, III, 753.
- and Ziff, M., compounds between phosphatides and basic proteins, III, 43.
- Ziff, M., and Cohen, S. S., conversion of prothrombin into thrombin, followed by means of the radioactive phosphorus isotope, III, 790.
- Ziff, M., and Hogg, B. M., reaction between kephalin and haemoglobins, III, 43.
- See also Ziff, M.
- Chargin, L. See Baehr, G., and Hyman, H. T.
- Charin, S. E., determination of dimensions of colloid particles, I, 410.
- Charipper, H. A. See Gordon, A. S., Kleinberger, W., Schweizer, M., and Vollmer, E. P.
- Charleroy, D. K. See Ruth, H. S.
- Charles, A. F., and Todd, A. R., structure of barium salt of heparin, III, 284.

- Charles, D. R., and Rawles, M. E., tyrosinase in feather germs, III, 532.
- Charles, E., maximal range of error in gross reproduction rates, III, 579.
- Charlesby, A., action of electrons and X-rays on photographic emulsions, I, 443.
- Charlet, L. See Baisset, A.
- Charlier, R., effect of sympathicomimetic amines [on heart volume], III, 13. Action of adrianol on the cardiovascular system, III, 439.
- See also Barzin, J., and Dautrebande, L.
- Charlot, G., oxidation-reduction indicators in qualitative analysis; use of ferrous dimethylglyoxime, I, 270.
- Charney, J. See Niederl, J. B.
- Charon, L., action of deriphylline and its constituents on alkali reserve, III, 154.
- Charonnat, R., thioide, additive compound of piperazine and carbon disulphide, II, 193.
- Charrier, G., and Ghigi, (Signa.) E., constitution of the chlorobenzanthrone obtained by direct chlorination of benzanthrone, II, 376.
- Chase, A. M., changes in absorption spectrum of *Cypridina* luciferin solutions during oxidation, III, 606.
- and Smith, E. L., regeneration of visual purple in solution, III, 115.
- Chase, B. A. See Geiger, J. C.
- Chase, C. T., and Cox, R. T., scattering of 50 kv. electrons by aluminium, I, 387.
- Chase, E. B., reproductive system of male opossum and its experimental modification, III, 808.
- Chase, L. H., effects of vitamin-B₁ in schizophrenia, III, 23.
- Chase, M. W., micro-organism decomposing group-specific A substances, III, 934.
- See also Landsteiner, K.
- Chase, R. E., and De Garis, C. F., brachial plexus in *Macacus rhesus* compared with man, III, 873.
- Chase, W. P., symphyogenetic development, III, 87.
- Chassin, M. R., and Bruger, M., effect of induced hypercholesterolemia on antibody-response in rabbits, III, 357.
- Chatagnon, C., urinary elimination of bromine from the human organism, III, 419.
- Chatenet, A. See Bodroux, D.
- Chatt, J., and Mann, F. G., stereochemistry of 3-covalent arsenic; isomeric forms of 5:10-di-p-tolyl-5:10-dihydroarsanthrene, II, 384. Tetra-aryl-phosphonium, -arsonium, and -stibonium salts. I. New method of preparation, II, 384.
- Chattas, A. See Tortone, J.
- Chatterjee, B., electrochemical properties of colloidal silicic acid. I. Interaction with bases. II. Interaction with neutral salts, I, 112.
- Chatterjee, H. N., cholesterol in anaemia of pregnancy, III, 282.
- Chatterjee, N. N., and Barpujari, G. N., synthesis of keto-acids; synthesis of 2-p-anisylcyclopentanone-3-carboxylic acid, II, 280.
- Das, B. K., and Barpujari, G. N., synthesis of keto-acids; action of sodium ethoxide on diethyl cyclopentanone-2-carboxylate-2-acetate, II, 280.
- Chauchard, A., Chauchard, B., and Chauchard, P., chronaximetric analysis of vasoconstrictor action of the splanchnic nerve, III, 392.
- See also Barry, D. T.
- Chauchard, B. See Barry, D. T., and Chauchard, A.
- Chauchard, P. See Barry, D. T., and Chauchard, A.
- Chaudhuri, H., Chopra, N. N., Ram, M., and Ray, J. N., biochemistry of *Aërobacter aerogenes* and *B. cereus*, III, 611.
- Chaudhury, P. C. R., chromium chromate, I, 265.
- Chaudry, N. A., Desai, R. D., and Sahariya, G. S., naphthalene series. II. Synthesis of *trans*-decahydronaphthalene-*trans*-2-carboxylic-3-acetic acid, II, 252.
- Chaustova, M. M. See Markovitsch, A. V.
- Chauvenet, (Mme.) G., rate of oxidation of cobaltous oxide, I, 122.
- Chauvenet, R., application of surface tension measurements to determination of molecular compounds of zinc nitrate and alkali nitrates, I, 115. Measurements of surface tension and determination of molecular compounds of beryllium nitrate and alkali nitrates, I, 163.
- Checceacci, L., immunising properties of polysaccharides of Vi antigen-containing and -free strains of *B. typhosus*, III, 772.
- Chéchan, C., Fleichl effect *in vivo* and *in vitro*, III, 343. Rôle of oxidation of the electrodes in Fleichl effect *in vitro*, III, 343.
- Cheesman, D. F., and King, Alexander, electrical double layer in relation to stabilisation of emulsions with electrolytes, I, 111.
- Cheesman, G. H., Duncan, D. R., and Harris, I. W. H., sodium polyiodides, I, 361.
- Cheftel, H. See Panouse-Pigeaud, (Mme.) M. L.
- Chemerdar, J. M. See Bachmann, W. E.
- Chen, G. See Van Dyke, H. B.
- Chen, H. See Rochelmeyer, H.
- Chen, H. K., and Thornton, H. G., structure of "ineffective" nodules and its influence on nitrogen fixation, III, 829.
- Chen, J. See Tsao, Y. F.
- Chen, K. C., Yü, T. P., Lin, S. H., and Chu, H. I., vitamin-C requirement of Chinese patients with scurvy, III, 674.
- Chen, K. K., and Chow, T. A., action of gelsemicine, III, 253.
- Harris, P. N., and Rose, C. L., action and toxicity of platyphylline and seneciophylline, III, 337.
- Harris, P. N., and Schulze, H. A., toxicity of lasiocarpine, III, 337.
- See also Anderson, R. C., Lee, H. M., Swanson, E. E., and Weigand, C. G.
- Chen, T., polyploidy in *Paramecium*, III, 624. Exchange of pronuclei during conjugation in *Paramecium bursaria*, III, 700. Conjugation in *Paramecium bursaria* with different chromosome number, III, 700.
- Chen, T. T., peptic synthesis of plastin, III, 686. Autolytic cathepsin action of rabbit liver injured by phosphorus or by ligation of bile duct, III, 909. Heterolytic cathepsin action of rabbit liver injured by phosphorus, chloroform, carbon tetrachloride, or by ligation of bile duct, III, 909.
- Hirooka, T., and Kawarada, M., caseinogen tryptone, III, 911.
- See also Chang, C. Y., Tartar, V., and Utzino, S.
- Chen, Y. P., Freeman, Smith, and Ivy, A. C., preparation of concentrated faecal phosphatase and its effect on dogs and rats, III, 349.
- Chêne, M. See Andrieux, J. L.
- Cheney, G., vitamin-B₁ and liver extract in treatment of non-specific chronic diarrhoea and colitis, III, 219. Plasma coagulation time as simple test for vitamin-K deficiency, III, 880.
- Cheney, L. C. See Gilman, H., and MacCorquodale, D. W.
- Cheng, C. See Tseng, T. P.
- Cheng, C. T. See Lohmann, K.
- Ch'eng, H. L. C., and Band, W., Benedicks homogeneous thermo-electric effect, I, 63.
- Cheng, L. T., and Chou, T. P., fluorine contents of foodstuffs in Szechuan, III, 817.
- and Ku, H. C., diet of middle-class Chinese and Moslems in Sungpan, III, 591.
- and Tao, H., vitamin-C content of dried, sugared, and salted Chinese vegetables and fruits, III, 595.
- Cheng, T. Y. See Chu, H. I.
- Cheng, Y. Y. See Wilson, S. D.
- Chenoch, M. A., colloid-chemical properties of thermolysed gelatin, and the potentiometric titration of the products of its acid hydrolysis, I, 71.
- Chenoweth, M. B. See Hediger, E. M.
- Chepens, C., perimetry; data collected in London clinics, III, 117.
- Cheramy, P., chloralose in urine, III, 667.
- and Lemos, A., experimental toxicology of sodium and potassium permanganate, III, 155.
- and Papavassiliou, M., acetone as a solvent for the extraction of alkaloids in toxicology, III, 339.
- Chermock, R. L. See Hance, R. T.
- Chernoff, L. H., determination of indole; modification of Ehrlich's reaction, II, 264.
- Cherry, C. B. See Wayburn, E.
- Cherry, R. H. See Sutherland, L.
- Chesley, E. R. See Chesley, L. C.
- Chesley, F. G., X-ray investigation of the phase transitions of sodium palmitate, I, 406.
- Chesley, F. F., Dunbar, J., and Crandall, L. A., jun., vitamin-B complex and its constituents in functional digestive disturbances, III, 512.
- See also Crandall, L. A., jun.
- Chesley, L. C., variability of proteinuria in hypertensive complications of pregnancy, III, 138.
- and Chesley, E. R., diodrast clearance and renal blood flow in normal pregnant and non-pregnant women, III, 503. Renal blood flow in women with hypertension and renal impairment, III, 666.
- Connel, E. J., Chesley, E. R., Katz, J. D., and Glissen, C. S., diodrast clearance and renal blood flow in toxæmias of pregnancy, III, 222.
- Chesner, C. See Ravid, J. M.
- Chevallier, A., and Manuel, S., determination of folliculin in urine, III, 653.
- Matheron, R., and Roux, H., oxidation of vitamin-A, III, 232.
- Chevillard, L., and Mayer, A., hypertrophy of essential organs under increased metabolism which accompanies acclimatisation to cold, III, 236.
- See also Wurmser, R.
- Chevremont, M. See Comhaire, S.
- Cheymol, J., and Quinquaud, A., effect of sympathicolytic drugs on insulin hypoglycæmia, III, 304.
- See also Hazard, R.

- Cheyne, V. D., effects of selective salivary gland extirpation on experimental dental caries in rat, III, 309. Inhibition of experimental dental caries by fluorine in absence of saliva, III, 464.
- Chi, Y. F., Kuan, C. C., Liu, C., and Lu, G. C., synthesis of 1-methyl-2:6-di(carbethoxymethylene)piperidine, II, 140.
- and Lu, G. C., preparation of trimethyl-eno bromide, II, 114.
- Lueng, C. C., and Yu, W. Y., synthesis of β -methoxy- β -phenyl- α -methylpropionic acid, II, 128.
- and Sza, C. H., synthesis of γ -dimethylpentan- β -ol, II, 114.
- Wei, S. S., and Liang, M. S., pyrimidines; molecular rearrangement of 2:6-dimethoxy-4-methyl-5-n-propylpyrimidine, II, 141.
- Chiancone, F. M., formation of xanthurenic acid from tryptophan in animals, III, 56. Urinary elimination of trimethylamine during fasting, III, 56.
- Chiang, Y. T. See Snapper, I.
- Chiari, O., diabetes mellitus in children, III, 239.
- Chibnall, A. C., Rees, M. W., Tristram, G. R., Williams, E. F., and Boyland, E., glutamic acid of tumour proteins, III, 46.
- Rees, M. W., Williams, E. F., and Boyland, E., glutamic acid of normal and malignant tissue-proteins, III, 507. Glutamic acid of proteins [relation to malignancy], III, 507.
- Chick, H., El Sadr, M. M., and Worden, A. N., epileptiform fits in rats maintained for long periods on a vitamin-B₆-free diet, III, 514.
- Macrae, T. F., and Worden, A. N., relation of skin lesions in the rat to dietary deficiency of vitamin-B₂ complex, III, 593.
- Chidsey, J. L. See Dye, J. A.
- Chiego, B. See Silver, H.
- Chikamori, T. See Fukui, G.
- Child, C. L., and Walker, Oswald J., continuous absorption spectrum of bromine in solution, I, 49.
- Childers, N. F., Kiplinger, D. C., and Brody, H. W., device for rapid rinsing of absorption towers used in gas analysis, I, 134.
- Childrey, J. H., vitamin-B and other measures in treatment of deafness, III, 845.
- Childs, W. H. J., and Jahn, H. A., infrared spectra and structure of molecules, I, 282.
- Chiles, H. M., use of 2-chloro-4:6-[di]benzylphenol for control of "athlete's foot," III, 758.
- Chiles, J. A., and Severinghaus, A. E., hormone studies with the ultracentrifuge. III. Application of Toepler's "schlieren" method to the analytical ultracentrifuge, I, 177.
- Ch'in, K. Y. See Snapper, I.
- Chinn, H., and Bellows, J., distribution of 2-sulphanilylamino pyridine in body, III, 677.
- and Farmer, C. J., determination of ascorbic acid in feces; its excretion in health and disease, III, 53.
- See also Farmer, C. J.
- Chiodi, H., relation between thymus and sexual organs, III, 656.
- Chiplonkar, M. W., atmospheric ozone at Bombay, I, 43.
- Chipman, J., and Marshall, S., equilibrium $\text{FeO} + \text{H}_2 = \text{Fe} + \text{H}_2\text{O}$ at temperatures up to the m.p. of iron, I, 216.
- Chistoni, A., and Beccari, E., pharmacology of phenylisopropylamine. V. Effect on isolated intestine of rabbit, III, 439.
- Chiswick, H. H., and Hultgren, R., X-ray study of alloys of silver with lead, bismuth, and thallium, I, 317.
- Chlebnikov, N., and Korshunova, A., secondary emission of composite surfaces, I, 1.
- Chlebnikov, N. I., determination of digestibility of crude fibre by hens, III, 318.
- Chlebnikov, P. A. See Ust-Katschkintzev, V. F.
- Chlopin, N. G., *in vitro* cultivation of peripheral nerve particles, III, 20.
- Chlopin, V. G., and Kusnetzova, V., adsorption of radium on lead sulphate, I, 208.
- Passvik-Chlopin, M. A., and Volkov, N. F., division of uranium nuclei by neutrons and the existence of transuranium elements, I, 5. New form of disintegration product of the uranium nucleus, I, 53. Chemical nature of the product of the rupture of uranium nuclei by neutrons. I and II, I, 142.
- Chobot, G. See Narat, J. K.
- Chodat, F., and Cano, H., colorimetric study of auxiliary redox systems in biological oxidations, III, 779.
- Chodkowski, K. See Dustin, A. P.
- Chodorow, M. I. See Manning, M. F.
- Choisser, R. M., and Ramsey, E. M., preparation of universally compatible ascitic fluid for transfusion, III, 9.
- Cholak, J. See Kehoe, R. A.
- Cholnoky, L. von, step-photometric determination of paprika pigments, III, 696.
- See also Zechmeister, L.
- Cholodova, M. See Markevitch, I.
- Choppin, A. R., Frediani, H. A., and Kirby, G. F., jun., homogeneous decomposition of ethyl chlorocarbonate, I, 28.
- and Kirby, G. F., jun., kinetic decomposition of ethyl chloroformate. II. Foreign gas effects, I, 364.
- See also Le Baron, I. M.
- Chopra, N. N., and Ray, J. N., biochemical synthesis of colouring matter by an Indian strain of *Penicillium*, III, 74.
- See also Chaudhuri, H.
- Chopra, R. N., opium addiction in India and its treatment, III, 602.
- Mazumdar, D. C., and Roy, A. C., lipid content of blood in epidemic dropsy, III, 791.
- and Rao, S. S., chemotherapy of filarial infection, III, 522.
- Roy, A. C., and Biswas, H. K., composition of sweat of Indians, III, 814.
- Chor, H., Cleveland, D., Davenport, H. A., Dolkart, R. E., and Beard, G., atrophy and regeneration of deenerated muscle, III, 19.
- Chorghade, S. L. See Krishnan, K. S.
- Chorine, V., effects of anticoagulants on determination of blood-constituents. I and II, III, 11.
- Chortis, P., changes in reticulo-endothelial system due to infection by *Plasmodium gallinaceum*, III, 74.
- Chou, C. N. See Bhabha, H. J.
- Chou, T. P. See Cheng, L. T.
- Chou, T. Q. See Chu, T. T.
- Chouaiech, M. S. See Roche, J.
- Choucroun, N., can tuberculous lesions be produced by a substance contained in the bacillus? III, 613. Distant tuberculous lesions produced by a chemical substance extracted from the bacillus; structure of this substance, III, 772.
- Chouke, K. S., bilateral superior vena cava in adult, III, 371.
- Chow, T. A. See Chen, K. K.
- Chow, T. T., and Chang, L. W., unique case of radiating folds of Descemet's membrane, III, 722.
- Chow, Y. S. See Andrade, E. N. da C.
- Chowdhry, (Miss) B. See Bose, D. M.
- Chowdhury, A. A., magnetic susceptibilities of fluorides, I, 152.
- Choyce, D. P. See Kerridge, P. M. T.
- Chrétien, A., and Hoffer, O., preparation and determination of inorganic salts: hydrazinium chloride and nitrate and potassium selenate, azide, and isocyanate, I, 127.
- and Nessius, A., cryoscopy in hydrazine hydrochloride, I, 249.
- Chrimlian, A. I., rooting response of geranium cuttings to treatment with heteroauxin, III, 693.
- Chrisman, C. H. See Barr, E. S.
- Christa, E., igneous rocks from Iran, I, 46.
- Christensen, B. E., and Facer, J. F., determination of carbon-oxygen equivalence and empirical formula by iodic acid oxidation, II, 30.
- Wong, R., and Facer, J. F., determination of the carbon content of organic materials; simple micro-method, II, 318.
- See also West, E. S.
- Christensen, B. V., and Nelson, J. W., bioassay of aconite, III, 603.
- Christensen, H. N., synthesis of esters of phosphoric acid related to phosphatides, II, 362.
- Christensen, L. R., and Jones, L. R., preparation of stable fibrinogen for study of streptococcal fibrinolysin, III, 356.
- Christian, H. S., Jorgensen, G. M., and Ellis, C., treatment of pneumococcal infections in children with sulphapyridine, III, 676.
- Christian, W. See Warburg, O.
- Christiani, A. F. von, physiologically active oxidation product of ergosterol, II, 254. Specific enzymes in carcinoma, III, 317.
- See also Maier, E.
- Christiansen, J. B., Halpin, J. G., and Hart, E. P., relation between manganese, sunlight, and winter hatchability of hen's eggs, III, 649.
- Christiansen, T., gastroscopic findings in patients with duodenal ulcer, III, 740.
- Christiansen, W. G. See Bickford, C. F.
- Christianson, R. A. See Hambleton, A.
- Christie, A. L. M., effect of X-rays on sex in *Drosophila subobscura* and an account of sex-linked characters, III, 179.
- Christlieb, M., degradation of oxytocin and vasopressin *in vitro*, III, 496.
- Christman, C. C. See Ovakimian, G., and Smith, L. I.
- Christopherson, J., isolation of single micro-organisms with the micro-manipulator, III, 774.
- Chrometzka, F., and Brunnssen, H., Von Gierke's glycogen storage disease, III, 239.
- and Witten, K. H., action of short and prolonged severe exercise on metabolism, III, 256.

- Chu, F. T. See Woo, T. T.
- Chu, H. I., Liu, S. H., Ch'en, K. C., Yu, T. F., Hsu, H. C., and Cheng, T. Y., effect of vitamin-C on calcium, phosphorus, and nitrogen metabolism in scurvy and osteomalacia, III, 515.
- Liu, S. H., Yu, T. F., Hsu, H. C., Cheng, T. Y., and Chao, H. C., vitamin-D action, early signs of depletion and effect of minimal doses in osteomalacia, III, 516.
- See also Chen, K. C., and Danielson, I. S.
- Chu, J. H., colouring matters of the Chinese drug ta-chi, *Euphorbia pikeensis*, Rupr., II, 256. Sapogenins of the Chinese drug yang-chiao-ou, II, 330. Identification of shih-chan-chu alkaloids, III, 83.
- Chu, J. P., plumage of male brown Leghorn fowl, III, 208. Endocrine system and plumage types. III. Relation between thyroid gland and plumage patterns in domestic fowls and ducks. V. Production of eclipse plumage in mallard by injection of anterior pituitary extract and dehydroandrosterone, III, 805.
- Chu, T. C. See Chang, T. L.
- Chu, T. T., and Chou, T. Q., gelsemine. I. Reduction of gelsemine, II, 360.
- Chudnoff, J., and Shapiro, H., two cases of complete situs inversus, III, 277.
- Church, M. G., and Hughes, E. D., mechanism of substitution at a saturated carbon atom. XII. Hydrolysis of benzhydryl chloride in acidic moist acetone, I, 391.
- Hughes, E. D., and Ingold, C. K., mechanism of substitution at a saturated carbon atom. XX. Kinetic demonstration of the unimolecular solvolysis of alkyl halides; kinetics of, and salt effects in, the hydrolysis of benzhydryl halides in aqueous acetone, I, 391.
- Hughes, E. D., Ingold, C. K., and Taher, N. A., mechanism of substitution at a saturated carbon atom. XXI. Kinetic demonstration of unimolecular solvolysis of alkyl halides; kinetics of, and salt effects in, hydrolysis of *p*-monoalkylbenzhydryl halides in aqueous acetone, I, 391.
- See also Bateman, L. C.
- Churg, J. See Antopol, W.
- Chute, A. L., and Smyth, D. H., metabolism of the isolated perfused cat's brain, III, 890.
- Chute, R. See Albright, F.
- Chvoitzkaja, M. A., reduction of dehydroascorbic acid in experimental hyperthyroidism, III, 578.
- Chvostikov, I. A. See Dobronravov, P. P.
- Ciacco, G., neoplasm in kidney of eel, III, 423. Effect of prolonged fasting on sexually immature eels, III, 425.
- Ciani, V., effect of temperature on resistance of spores of *B. histolyticus* to mercuric chloride, III, 770. Resistance of spores of aerobes to mercuric chloride, III, 770.
- Ciaranfi, E., oxidation of methyl esters of monocarboxylic fatty acids by normal and neoplastic tissue, III, 150. Biological oxidation of methyl esters of monocarboxylic fatty acids C_4 - C_8 , compared with that of the free acids, III, 328. ω -Oxidation of fats in tumour tissue, III, 424.
- Cibis, P., inheritance of familial optic nerve atrophy (Leber's disease), III, 574.
- Cicardo, V. H., action of potassium found in tissue extracts, III, 336.
- and Moglia, J. A., liberation of potassium from muscle by acetylcholine, III, 635.
- Cima, E., reaction between allantoin and phenylhydrazine, II, 56.
- Cinberg, B. L., and Goldman, S. F., potency evaluations of human chorionic gonadotrophic preparations, III, 494.
- See also Goldman, S. F.
- Ciocco, A., sex differences in morbidity and mortality, III, 373, 700. Trend in proportional contribution of socio-economic groups to natality, III, 876.
- Cioglia, L., and Fradà, G., effect of sympathine (β -phenylisopropylamine) on arterial pressure, respiration, and splenic contraction, III, 61.
- and Infantellina, F., metabolism in guinea-pigs during experimental scurvy. I. Utilisation of carbohydrates, lipins, and proteins. II. Calcium and phosphorus balance, III, 53. Ascorbic acid and excitability of vagus nerve, III, 392. Ascorbic acid and vagus excitability, III, 798.
- Cionga, E. See Nicolesco, G.
- Ciorapciu, S., and Păunescu-Podeanu, A., accidents following intravenous administration of 10% calcium gluconate, III, 442.
- See also Dumitrescu-Mante, D.
- Ciortan, V. See Angelescu, E.
- Cipollaro, A. C., and Mutscheller, A., absorption of Roentgen rays by skin, III, 342.
- See also MacKee, G. M., and Rubin, L. C.
- Cipriani, A. See Jasper, H.
- Cirilli, V., hydrated monocalcium silicate, I, 227.
- Cirlea, J., and Bogdan, L., infantile bronchial asthma, III, 887.
- Cismaru, A. See Fabre, R.
- Cittert, H. P. van. See Burger, H. C.
- Ciuflă, G. See Aiazzi-Mancini, M.
- Ciurdariu, P. See Benetato, G.
- Ciusa, R., mechanism of citric acid formation, III, 538.
- Claborn, H. V., and Smith, L. T., acetylation of lactic esters by keten, II, 5.
- See also Smith, L. T.
- Clack, K. D. G. See Briggs, T. R.
- Claes, E., pupillo-motor activity of diencephalon and mesencephalon in non-anæsthetised cat, III, 21. Cortical oculomotor centres in unanæsthetised cat, III, 22. Oscillographic analysis of spontaneous and sensory activity of visual cortex in non-anæsthetised cat, III, 111.
- Clairbois, L. See Hugel, G.
- Clairmont, P., and Brunner, W., hyperparathyroidism, III, 208.
- Clamann, H. G., and Becker-Freyseng, H., effect of high altitudes on whooping cough, III, 195.
- See also Becker-Freyseng, H.
- Clancy, E. P., induced radioactivity of krypton, I, 340.
- Clapp, D. B., reaction of a thiophen derivative with maleic anhydride, II, 23.
- Clapp, F. G., problem of petroleum, I, 48.
- Clapp, M. See Evans, L. T.
- Clar, E., aromatic hydrocarbons. XXIII. Melting with zinc dust; reducing organic compounds. XXIV. Hexacene, a green, simple hydrocarbon. XXVIII. Hexaphene, a hydrocarbon of the phenic series, and analysis of its absorption spectrum by the annellation method. XXV. Condensation products of anthrone with chloral. XXVI. Proposed nomenclature of condensed ring systems. XXIX. Calculation of [reduction] potentials of quinones from ordinal numbers of corresponding hydrocarbons according to the annellation process, I, 362; II, 74, 75, 123, 124, 273.
- John, F., and Avenarius, R., aromatic hydrocarbons. XXVII. Benzologues of pentaphene and their derivatives, II, 124.
- See also Brass, K.
- Clara, M., arterio-venous anastomoses, III, 696.
- Clardy, F. B. See Gibbs, R. S.
- Clare, S., and Tauber, O. E., circulation of hæmolymp in wings of cockroach *Blatella germanica*, L. I. Normal wings, III, 794.
- Claringbull, G. F., bavenite in Switzerland, I, 239.
- Clark, A. See Bloomquist, C. R.
- Clark, A. E. See Gay, F. P.
- Clark, A. L., and Katz, L., thermodynamic surfaces of water, I, 154. Resonance method for measuring the ratio of the specific heats of a gas, C_p/C_v . I. and II., I, 248, 271.
- Clark, G. H. D., systematics of band-spectral constants. V. Interrelation of dissociation energy and equilibrium internuclear distance of diatoms in ground states, I, 149. Estimation of ground state dissociation energies of diatoms of symmetrical molecular groups, I, 400.
- Clark, C. R. See Stearn, A. E.
- Clark, D. See Powell, H. M.
- Clark, D. E. See Dragstedt, L. R.
- Clark, E. L. See Clark, E. R.
- Clark, E. P., constituents of *Helenium* species. III. Ester nature of tenulin. IV. The compound, m.p. 233-234°, obtained from *H. tenuifolium*, II, 184, 352.
- Clark, E. R., and Clark, E. L., extra-endothelial cells of living mammalian blood vessels, III, 625.
- Clark, G., use of the Horsley-Clarke instrument on rat, III, 20. Effect of metabolic stimulants on diabetes insipidus in the rat, III, 731.
- and Wang, S. C., liberation of pressor hormone following stimulation of hypothalamus, III, 402.
- See also Ranson, S. W.
- Clark, G. L., and Robinson, J. V., monolayers of esters and chlorinated derivatives possibly useful as lubricating addition agents, I, 409.
- Clark, H. See Birch, F.
- Clark, H. C., hypertension in early childhood, III, 634.
- Clark, J. H. See Adams, R.
- Clark, K. J. See Boyd, E. M.
- Clark, L. V. W. See Nissan, A. H.
- Clark, R. E. D., friction as an indicator in titration, I, 418. Production of randomness as a suggested measure of intelligence, III, 801.

- Clark, R. H. See Ashford, W. R., and Corbould, I.
- Clark, R. O., and Stillson, G. H., micro-determination of carbon and hydrogen; use of Abrahamczik absorption tubes, II, 334.
- Clark, S. L., motor seizures accompanying small cerebellar lesions in cats, III, 483.
- Clark, W. D., aluminium-tungsten equilibrium diagram, I, 437.
- Clark, W. E. Le G., palaeontological evidence bearing on human evolution, III, 373. Nerve of pineal gland, III, 496. Nervous and vascular relations of pineal gland, III, 806.
- Clark, W. G., electrical polarity and auxin transport [in plants], III, 942.
- Arnow, L. E., and Opsahl, J. C., configuration of glutamic acid isolated from proteins of pig and chick embryo tissues, III, 746.
- and Barnes, R. H., effects of salts and adrenal cortical extracts on toxicity of drugs, III, 846.
- and Wick, A. N., effect of adrenalectomy on fat absorption measured by fat excretion in stool, III, 210.
- Clark, W. M., and Perkins, M. E., metalloporphyrins. V. Spectrophotometric study of pyridine [iron] coproporphyrin I, II, 383.
- Taylor, J. F., Davies, T. H., and Vestling, C. S., metalloporphyrins. I. Co-ordination with nitrogenous bases; theoretical relations, II, 383.
- See also Taylor, J. F.
- Clarke, B. E., myoepithelial hamartoma of the gastro-intestinal tract, III, 816.
- Clarke, D. L., and Bowden, S. T., *p*-phenoxytriphenylmethane and the corresponding free radical, II, 343.
- See also Bowden, S. T.
- Clarke, E. de C., and Ellis, H. A., metasomatism of country near ore-bodies and its possible economic significance, I, 181.
- Clarke, E. L., and Boyd, E. M., seasonal study of iodine content of blood of birds, III, 883.
- See also Boyd, E. M.
- Clarke, E. T., and Korff, S. A., latitude effects in cosmic rays at far southern latitudes, I, 385.
- See also Murphy, E. J.
- Clarke, F., Solkot, R., and Corley, R. C., metabolism of rare sugars, III, 150.
- Clarke, G. E., treatment of psoriasis with concentrated viosterol, III, 595.
- Clarke, J. A., and Ricehiuti, J. F., jun., treatment of ragweed dermatitis, III, 528.
- Clarke, T. H., and Stegeman, G., α - and β -monopalmitin; heats of combustion and specific heats at 25°, I, 353.
- See also Brunswick, A.
- Clauberger, K. W., differentiation of types of diphtheria toxin, III, 541.
- Claude, A., enhancing effect of azoproteins on lesions produced by vaccine virus, Shope fibroma virus, and agent transmitting chicken tumour I, III, 141. Chemical composition of tumour-producing fraction of chicken tumour I, III, 141. "Spreading" properties and mucolytic activity of leech extracts, III, 707. Particulate components of normal and tumour cells, III, 747.
- and Rothen, A., properties of causative agent of chicken tumour. XIV. Relation between tumour nucleoprotein and active principle, III, 854.
- Claudian, I. See Grecu, A., and Gruia-Ionescu, N.
- Claus, P. E. See Guyer, M. F.
- Clausen, F. See Blumenfeld, C.
- Clausen, F. W., and Freudenberger, C. B., comparison of effects of male and female sex hormones on immature female rats, III, 212.
- Clausen, H. J., effect of ovariectomy and hypophysectomy on gestation in snakes, III, 905.
- Clausen, J., influence of vomiting and nausea on renal function, III, 137.
- Clausen, S. W., Baum, W. S., McCoord, A. B., Rydeen, J. O., and Breese, B. B., mobilisation of vitamin-A from its stores in tissues by ethyl alcohol, III, 673.
- Clavel, A., circulation of aqueous humour, III, 203.
- Clay, J., absolute value of cosmic-ray ionisation at sea level in different gases, I, 188. Intensity of cosmic radiation under thick layers, I, 188.
- and Bruins, E. M., variations of cosmic-ray intensity with variations of barometric pressure and temperature at sea level, I, 189.
- Clayton, S. G., effects of injections of pituitary extract immediately after delivery, III, 302.
- Clearman, H. E., jun., extension of the Bi I spectrum, I, 381.
- Cleekley, H. M. See Kruse, H. D., and Sydenstricker, V. P.
- Cleghorn, R. A., effect of occlusion of carotids and injection of ephedrine on blood pressure of cats in adrenal insufficiency, III, 411.
- Armstrong, C. W. J., and Austen, D. C., observations on adrenalectomised dogs maintained by a diet high in sodium salts and low in potassium, III, 210.
- Fowler, J. L. A., and Wenzel, J. S., treatment of Addison's disease by deoxycorticosterone acetate, III, 306.
- Clem, W. J., and Hamilton, C. S., nitro- and amino-benz[o]quinolines and derivatives, II, 381.
- Clemence, L. W. See Raiziss, G. W.
- Clement, H., magnesium pentamethylphenyl bromide, II, 210.
- Clementi, A., compensatory hyperdiastole and subsequent hypersystole in various classes of vertebrates, III, 14. Arginine as sole precursor of urea in avian organism, III, 56.
- Clemmesen, J., influence of Roentgen radiation on heterologous and homologous transplantation immunity, III, 590.
- See also Fridericia, L. S.
- Clemmesen, S. See Fridericia, L. S.
- Clemlø, G. R., Gardner, C., and Raper, R., optical rotatory powers of 4-substituted benzhydrylamines, II, 40.
- and Swan, G. A., molecular dissymmetry due to symmetrically placed hydrogen and deuterium; α -pentadeuterophenylbenzylamine problem, II, 40.
- See also Barker, R. L.
- Clerc, A., and Paris, R., diuretic action of digitoflavone, III, 333. Diuretic action of flavone derivatives, particularly scoparine (scoparoside), III, 333.
- and Quinquaud, A., electric changes in heart produced by traction on its walls, III, 189. Summation of electric changes in experimentally divided heart, III, 189.
- Cleveland, D. See Chor, H.
- Cleveland, D. E. H., mite dermatitis, III, 684.
- Cleveland, F. F., Murray, M. J., Haney, H. H., and Shackelford, J., Raman spectra of simple ethers, I, 195.
- See also Murray, M. J.
- Cleveland, R., cyclic changes in chromatin of nuclei of endometrium, III, 659. Chromatin in nuclei of endometrium from monkeys under experimental conditions, III, 906.
- Cleveland, W. H., sulphanilamide therapy and liver damage, III, 862.
- Clews, C. J. B., crystal structure of conjugated hydrocarbons at low temperatures. I. Butadiene, I, 350.
- and Robinson, H. R., X-ray electrons expelled from metals by silver $K\alpha_1$ radiations, I, 425.
- Clifford, P. A., and Brice, B. A., neutral wedge abridged spectrophotometer, I, 302.
- Clifton, C. E., fermentation of pyruvic acid by *Cl. botulinum*, III, 769. Utilisation of serine by *Cl. botulinum*, III, 769.
- Clifton, W. M., Frank, A., and Freeman, S., osteopetrosis (marble bones), III, 2.
- See also Anspach, W. E.
- Climenko, D. R., *in vitro* action of sulphanilamide derivatives on the PR-8 strain of influenza virus, III, 677. *N*-Dodecylsulphanilamide. II. Experimental infections with *Mycobacterium tuberculosis*, III, 756.
- Crossley, M. L., and Northey, E. H., influence of disulphanilamide on experimental influenza infections, III, 59.
- and Schmidt, R. L., *N*-dodecylsulphanilamide. I. Experimental infections with β -haemolytic streptococci, III, 756.
- Cline, J. E. See Fox, Charles L., jun.
- Cline, J. K. See Jolliffe, N.
- Cloetens, R., preparation and properties of alkaline phosphatase-I, III, 165. Activation and inhibition of alkaline phosphatases, III, 348. Hydrolysis of sodium β -glycerophosphatase by alkaline phosphatase-I, III, 349.
- Cloke, J. B., jacketed receiver for vacuum distillation, I, 378. Rates of reaction of cyclopropyl ketimines with water, II, 90.
- and Pilgrim, F. J., reaction of tetrahydrofuran and 2:5-dimethyltetrahydrofuran with acyl halides, II, 19.
- Clow, A., deliquescence in carbamide and methylcarbamides, I, 360.
- and Helmrich, N. L., ultra-violet absorption and chemical constitution of substituted carbamides and thiocarbamides, I, 310.
- Kirton, H. M., and Thompson, J. M. C., structure of compounds containing S-O and S-Cl bonds. I. Introduction; derivatives of $[SO_2]^{-2}$ and $[S_2O_2]^{-2}$ radicals. II. Derivatives of $[SO_2]^{-2}$ and $[S_2O_2]^{-2}$ radicals, I, 434.
- and Shand, G., two constant-pressure devices, I, 42.
- Clowes, G. H. A., Davis, W. W., and Krah, M. E., possible biological significance of interactions between polycyclic hydrocarbons and sterols in surface films, III, 259.
- Kelch, A. K., and Krah, M. E., extra-cellular and intracellular hydrogen-ion concentration in relation to anaesthetic effects of barbituric acid derivatives, III, 524.

- Clowes, G. H. A., and Krah, M. E., cell metabolism and cell division. III. Oxygen consumption and cell division of fertilised sea urchin eggs in presence of respiratory inhibitors. IV. Combined action of substituted phenols, cyanide, carbon monoxide, and other respiratory inhibitors on respiration and cell division, III, 623.
See also Hutchens, J. O., and Krah, M. E.
- Clusius, J., and Dickel, G., separation tube. I. Principles of a new process for the separation of gas mixtures and of isotopes by thermo-diffusion. II. Separation of the chlorine isotopes, I, 135.
- Clutterbuck, P. W., Mukhopadhyay, S. L., Oxford, A. E., and Raistrick, H., biochemistry of micro-organisms. LXV. Chlorine metabolism by moulds; caldariomycin, $C_3H_8O_2Cl_2$, a metabolic product of *Caldariomyces fumago*, Woronichin, II, 251.
- Clutton, R. F., Schoenheimer, R., and Rittenberg, D., protein metabolism. XII. Conversion of ornithine into arginine in the mouse, III, 237.
- Coats, R., propylitisation and related types of alteration on the Comstock Lode, I, 303.
- Coats, R. R., and Gibson, D. T., reversibility of the rearrangement of *o*-hydroxy-sulphonates, II, 216.
- Cobb, J. W. See Muller, S.
- Cobb, S., neuropsychiatry, III, 300.
See also Finlay, K. H.
- Cobb, W. M., cranio-facial union in man, III, 466.
- Coburn, A. F. See Todd, E. W.
- Cocconi, G., instability of the mesotron, I, 91.
and Tongiorgi, V., neutrons in cosmic rays, I, 53. Secondary radiation of cosmic rays, I, 242. Equilibrium of the components of cosmic radiation at sea level, I, 341.
- Cochrane, C. C. See Barnes, R. P.
- Cochrane, R. G., Paulraj, M., and Salmond, M. D., effect of wheat diet on painful complications and sequelae in leprosy, III, 856.
- Cochrane, W. J., and Smith, R. P., fatal case of accidental poisoning by potassium chlorate, III, 253.
- Cockbain, E. G. See Schulman, J. H.
- Cockcroft, J. D., engineering and atomic transmutation, I, 331.
- Cocker, W., and Harris, J. O., preparation of alkylamino-acids and their electro-metric titration, II, 366.
and Turner, D. G., condensation products of *m*-dialkylaminobenzaldehydes with compounds containing reactive methylene groups, II, 77.
- Cockerham, G., metabolism of mosaic-diseased and normal potatoes, III, 777.
- Cockett, A. H., and Ferguson, A., surface tension of water and heavy water, I, 61. Specific heat of water and of heavy water, I, 154.
- Coco, R. M., effects of antuitrin-S, progesterin, and vital dye on late pregnancy in rat, III, 737.
- Codarcea, A., some alkaline eruptive rocks and lamprophyres of the region of Ogradina (Department of Severin), I, 182.
- Code, C. F., histamine content of blood of guinea-pigs and dogs during anaphylactic shock, III, 97.
- Code, C. F., and Hester, H. R., blood-histamine during anaphylactic shock in horse and calf, III, 97.
and Varco, R. L., chronic histamine action, III, 925.
See also Walpole, S. H.
- Coe, G. C. See Freilich, E. B.
- Coe, R. J. See Barnes, T. C.
- Coe, W. R., divergent pathways in sexual development, III, 465.
- Coetzee, C. B., sillimanite-corundum rock: a metamorphosed bauxite in Namaqualand, I, 421.
- Coffey, R. J., Koppányi, T., and Linegar, C. R., effect of barbiturates on digestive secretion, III, 500.
- Mann, F. C., and Bollman, J. L., faecal residue of fat, protein, and carbohydrate in normal dog, III, 664. Effect of exclusion of bile on absorption of foodstuffs, III, 664. Influence of the pancreas on utilisation of foodstuffs, III, 664. Substitution therapy in experimental pancreatic deficiency, III, 664.
- Coffin, C. C. See Parlee, N. A. D.
- Coffman, J. R., and Koch, F. C., effect of testosterone propionate on creatinuria, III, 645.
- Cogan, D. G., experimental production of so-called bullous keratitis, III, 638. Waltzing guinea-pigs with particular reference to ocular movements and righting reflexes, III, 804.
- Coggeshall, C., and Root, H. F., acromegaly and diabetes mellitus, III, 404.
- Coggeshall, H. C., Warren, C. F., and Bauer, W., cytology of normal human synovial fluid, III, 701.
- Coggeshall, L. T., transmission of lymphocytic choriomeningitis by mosquitoes, III, 78. Selective action of sulphanilamide on parasites of experimental malaria in monkeys *in vivo* and *in vitro*, III, 438.
- Coghill, R. D. See Hook, E. O., and Miner, (Miss) H. I.
- Cohan, L. H., and Hackerman, N., determination of emulsifying efficiencies, I, 320.
- Cohen, A. (Zurich). See Treadwell, W. D.
- Cohen, Aaron, Cook, J. W., and Roe, (Miss) E. M. F., colchicine and related compounds. I. Structure of colchicine, II, 144.
- Cohen, A. E., and Waterstone, M. L., epinephrine hypersensitivity, III, 846.
- Cohen, B., Showstack, N., and Myerson, A., synergism of dilantin sodium and phenobarbital in epilepsy, III, 441.
- Cohen, B. R. See Wikoff, H. L.
- Cohen, E., and Bleckings, J. J. A., jun., effect of degree of dispersity on physico-chemical constants. VII. Effect of the dispersity of crystalline substances on electrical conductivity of their saturated solutions. VIII. Influence of dispersity of crystalline substances on electrical conductivity of their saturated solutions. IX. Polarographic analysis of barium sulphate solution saturated at 25°, I, 119, 207.
- Cohen, H., intracranial causes of headache, III, 114.
- Cohen, Harry. See Snyder, H. R.
- Cohen, H. R., and Freda, V. C., preparation and diagnostic value of antiserum for placental protein, III, 545.
and Nedzel, A. J., specific action of an antiserum for placental proteins on placenta and normal progress of pregnancy, III, 581.
- Cohen, J. I., factors determining physical size and proportions, III, 373.
- Cohen, J. L. See Braun, C. E.
- Cohen, J. Y. See Zueckerman, I. C.
- Cohen, K., packed fractionation columns and concentration of isotopes, I, 421.
and Urey, H. C., vapour pressure of ortho- and para-hydrogen and ortho- and para-deuterium, I, 17.
- Cohen, L., Gray, I., Nash, P. I., and Fink, H., calcareous aortic stenosis, III, 632.
- Cohen, L. H. See Haggard, H. W.
- Cohen, M. A. See Locke, A.
- Cohen, M. B., Cohen, S., and Hawver, K., transmission of reagin through placenta, III, 66. Nature of house-dust antigen, III, 255.
- Cohen, M. E. See Thomson, K. J.
- Cohen, P., Weichsel, M., and Lapin, J. H., comparative study of therapeutic agents in treatment of pertussis, III, 445.
See also Lapin, J. H.
- Cohen, P. P. See Krebs, H. A.
- Cohen, S. See Cohen, M. B., and Pollack, H.
- Cohen, S. G. See Bartlett, P. D.
- Cohen, S. S. See Chargaff, E.
- Cohen, W. See Osgood, E. E.
- Cohn, D. J. See Kaplan, I., and Levinson, A.
- Cohn, E. J., proteins as chemical substances and as biological components, III, 825.
- Ferry, J. D., Livingood, J. J., and Blanchard, M. H., solubility and dielectric properties of insulin and its crystallisation with radioactive zinc, III, 123.
See also Fevold, H. L.
- Cohn, E. T., and Schmidt, C. L. A., effect of cholic acid of vitamin-K on prothrombin levels of bile fistula rats, III, 10.
See also Cohn, W. E.
- Cohn, G., significance of magnetic condition in the activity of a catalyst; catalytic decomposition of formic acid on cobalt-palladium alloy in relation to magnetic changes, I, 327.
and Goodeve, C. F., photochemistry of antimony oxide, I, 226.
- Cohn, I. See Nadler, S. B.
- Cohn, J., unusual reactions to slow epinephrine, III, 30.
- Cohn, M. See Behrens, O. K., and Du Vigneaud, V.
- Cohn, M. L. See Corper, H. J.
- Cohn, R., post-natal growth of lung, III, 622.
- Cohn, W. E., and Cohn, E. T., permeability of red corpuscles of dog to sodium ions, III, 8.
- Cohn, W. M., transmission of glucose glass in the near infra-red, I, 194. Polarisation of light emitted by electrically exploded wires, I, 335.
- Cokkinis, A. J., and McElligott, G. L. M., relapses after sulphonamide cure of gonorrhoea, III, 151.
- Colby, W. F. See Spees, A. H.
- Cole, C. G. See Chapin, R. M.
- Cole, G. C., changes in lungs of drug addicts, III, 253.
- Coel, H. H., prolificacy of rats treated with mare gonadotropic hormone, III, 899.
and Goss, H., gonadotropic hormone in non-pregnant mare, III, 403.
- Pencharz, R. I., and Goss, H., biological properties of highly purified gonadotrophin from pregnant mare serum, III, 905.
See also Goss, H., and Pencharz, R. I.

- Cole, H. L. See Mottern, H. H.
- Cole, H. N., De Oreo, G. A., Driver, J. R., Johnson, H., and Schwartz, W. F., bismuth injections in therapeutic malaria, III, 927.
- Cole, K. S. See Curtis, H. J., and Dean, R. B.
- Cole, L., prognosis [and treatment] of tetanus, III, 445.
- Cole, L. C., and Cole, W. G., roentgenologic diagnosis of pneumoconiosis (silicosis) and use of "electric eye" to determine regional densities, III, 257.
- Cole, P. A. See Haney, H. F., and Hollaender, A.
- Cole, V. V., and Harned, B. K., influence of sex and age on diabetic traits in a strain of rats, III, 413.
- See also Harned, B. K.
- Cole, W. See Bachmann, W. E.
- Cole, W. C., Kimball, D. C., and Daniels, L. E., neonatal asphyxia, III, 105.
- Cole, W. G. See Cole, L. C.
- Cole, W. H., laryngeal spasm and so-called tracheal collapse, III, 635. Composition of fluids and sera of marine animals and of the sea-water in which they live, III, 684.
- See also Allison, J. B.
- Colebrook, L., and Maxted, W. R., chemotherapy and serum in streptococcal infections, III, 331.
- See also Fuller, A. T.
- Coleman, H. S., and Yeagley, H. L., relation of light intensity to lateral growth on a photographic plate, I, 417.
- Coleman, H. W. See Hamilton, W. F.
- Coleman, R. M. See Allen, N.
- Coley, J. D. W. A. See Mason, J. H.
- Coley, B. L., and Peterson, R. L., malignant tumours of bone in children, III, 46.
- Colin, H., reactions in alcoholic fermentation, III, 449.
- and Belval, H., structure of dextran, III, 694.
- and Lemoyne, S., yellowing of beetroot leaves in autumn, III, 368.
- Collander, R., permeability in Characeae. III. Absorption and osmosis of cations, III, 361.
- Coller, F. A., Ransom, H. K., and Rife, C. S., reactions of peritoneum to trauma and infection, III, 665.
- Collet, A. See Feitknecht, W.
- Collet, J. See Roche, J.
- Collander, B. See Hedvall, J. A.
- Collias, N. See Allee, W. C.
- Collie, C. H., and Morgan, F., cause of multiple discharges in a Geiger-Müller counter, I, 83.
- and Roaf, D., action of the Geiger-Müller counter, I, 272.
- Collier, H. B., small-scale electrodialysis cell, I, 420. Fate of phenothiazine in sheep, III, 924. Plastein formation. I. Formation of plastein by papain, III, 932.
- See also Swales, W. E.
- Collier, H. O. J., depression of neuromuscular transmission in a crab by phenothiazine, III, 796.
- Collier, W. A., gold therapy of experimental polyarthritis in rats, III, 155.
- Collings, W. D., Remington, T. W., Hays, H. W., and Drill, V. A., modified method for preparation of renin, III, 710.
- Collins, C. G. See Arnold, R. T.
- Collins, C. G. See Russ, J. D.
- Collins, D. A. See Spiegel, E. A.
- Collins, G. B., Waldman, B., and Guth, E., disintegration of beryllium by electrons, I, 5.
- See also Waldman, B.
- Collins, H. L. See Carter, R. F.
- Collins, J. A., and Mathewson, C. H., plastic deformation and recrystallisation of aluminium single crystals, I, 288.
- Collins, L. H., jun. See Shaffer, B.
- Collins, V. J. See Hooker, C. W., and Van Heuverswyn, J.
- Collip, J. B., endoerines in relation to gastro-intestinal tract, III, 34. Orally active [adrenal] medullotropic principle in primary extract of pituitary tissue, III, 401. Anti-diabetogenic effect of primary alcoholic extract of pituitary tissue administered orally, III, 405.
- Selye, H., and Thomson, D. L., anti-hormones, III, 401.
- See also Neufeld, A. H., and Noble, R. L.
- Collyer, T. A., and Kenyon, J., resolution of β -naphthylmethylcarbinol, II, 251.
- Colombani, A., differential apparatus, using medium frequency [alternating current] and an amplifier, for detection and measurement of magnetic permeability in very small specimens of substance, I, 176.
- Colonna, M., derivatives of 3-nitro-4-hydroxyquinoline. II. Synthesis of 3-nitro-4:6-dihydroxyquinoline, II, 54. Sulphur derivatives of pyridine; (synthesis of 2:3-pyridothiochromanone), II, 237.
- Colonna, P. C. See De Santo, D. A.
- Colowick, S. P., Welch, M. S., and Cori, C. F., phosphorylation of glucose in kidney extract, III, 518. Glucose oxidation and phosphorylation, III, 609.
- Colquhoun, D. B. See Robertson, W. M. F.
- Colson, G. M. See Hamilton, W. F.
- Coltof, W., establishment and application of rules for interaction between high-molecular solutes and organic solvents, I, 358.
- Colvin, E. D. See Bartholomew, R. A.
- Colvin, J. H. See Jones, G.
- Colvin, J. W., and Mills, C. A., case of body heat loss and resistance to infection, III, 266.
- Colyer, H. See Fazekas, J. F.
- Coman, D. R., positive and negative chemotaxis; experiments with myxomycete, III, 538.
- Combiesco, C., and Sorn, E., electrophoresis of O- and vi-antigens extracted from *B. typhosus*, III, 357.
- See also Soru, E.
- Comean, W. J., and White, P. D., clinical significance of right axis deviation in electrocardiogram, III, 290.
- Comfort, M. W., and Erickson, C. W., untoward effects from use of ergot and ergotamine tartrate, III, 439.
- and Osterberg, A. E., concentration of serum-amylase and serum-lipase in pancreatic disease, III, 811.
- Parker, R. L., and Osterberg, A. E., concentration of pancreatic enzymes in duodenum of normal persons and persons with disease of upper abdomen, III, 37.
- Comhaire, S., and Chevrement, M., lactoflavin in organs of the guinea-pig on activation of cellular metabolism, III, 593.
- Comings, E. W., and Egly, R. S., viscosity of gases and vapours at high pressures, I, 315.
- Cominole, B. See Rosen, S. R.
- Commandon, J., and De Fonbrune, P., nuclear grafts in amoeba, III, 280. Effects of removal of nucleus in amoeba, III, 281.
- Common, R. H., mineral metabolism of pullets. IV., III, 329. Plasma-alkali reserve in domestic fowl, III, 707.
- Commoner, B., cyanide inhibition and mechanisms of cellular respiration, III, 516.
- See also Thimann, K. V.
- Comolli, E. P., and Santoro, A. S., biology of leucocytes in *Bufo arenarum*, III, 283.
- Comptoir, F. C. See Schwentker, F. F.
- Compton, A. H., time variations of cosmic rays, I, 5. What we have learned from scattered X-rays, I, 399.
- See also Monk, A. T.
- Compton, J., crystalline β -chloroethyl- β -D-glucoside, II, 245.
- and Haver, F. E., jun., developing cotton fibre. I., III, 830.
- See also Haver, F. E., jun.
- Comroe, B. I. See Griffith, J. Q., jun.
- Comroe, J. H., jun., location and function of chemoreceptors of aorta, III, 101.
- See also Schmidt, C. F.
- Comsa, G. See Dimitriu, C. C.
- Comstock, G. See Sontag, L. W.
- Comstock, G. C., measurement at high frequencies of diamagnetic Faraday effect in liquids, I, 351.
- Conard, C. R., action of phosphorus pentachloride on β -phenylbenzylidenacetophenone, II, 279.
- Conel, J. L., distribution of affected nerve cells in amyotonia congenita, III, 798.
- Conn, G. K. T., and Wu, C. K., Raman and infra-red spectra of uranyl salts; structure of the uranyl group, I, 57.
- Conn, H. J., standardisation of Giemsa stain, III, 702.
- and Wolfe, G. E., flagella staining as a routine test for bacteria, III, 933.
- Conn, J. B., Kistiakowsky, G. B., and Roberts, R. M., heats of organic reactions. IX. New calorimeter and denaturation of methemoglobin by alkali, I, 419.
- Conn, J. W., interpretation of glucose tolerance test; necessity of a standard preparatory diet, III, 518.
- Connell, E. J. See Chesley, L. C.
- Connell, K. See Woodbridge, P. D.
- Connell, W. F., Johnston, G. M., and Boyd, E. M., expectorant action of resyl (glycerol guaicolate) and other guaiacols, III, 678.
- Connolly, C. J., development of cerebral sulci, III, 622.
- Connor, C. L., effects of chronic alcohol poisoning in rabbits, III, 823.
- See also Chaikoff, I. L., Ginzton, L. L., and Lawrence, J. M.
- Connor, E. B. See Kaye, I. A.
- Connor, R. See De Benneville, P. L., Pomerantz, A., and Ziegler, W. M.
- Conrad, F. H., Hill, E. F., and Ballman, E. A., freezing points of the system ethylene glycol-methanol-water, I, 249.
- Conrad, R. M. See Avery, T. B., and Warren, D. C.
- Conrat, H. L. F. See under Fraenkel-Conrat, H. L.
- Consolazio, W. V., and Talbott, J. H., determination of total base in biological material by electrodialysis, III, 369.
- See also Coombs, F. S., and Talbott, J. H.
- Console, W. A. See Parrish, P. P.

- Constantine, E. F., inter-relationship of retinal and systemic arterial pressures and intraocular tension in normal and syphilitic patients, III, 574.
- Constantinesco, D. See Solacolu, T.
- Constantinesco, E. See Nicolesco, G.
- Constantinescu, P. See Grecu, A., and Gruiă-Ionesen, N.
- Conway, E. J., and Boyle, P. J., mechanism for concentration of potassium by cells, with experimental verification for muscle, III, 160.
- Kane, F., Boyle, P. J., and O'Reilly, H., localisation of electrolytes in muscle, III, 19.
- Conway, H. See Heuer, G. J.
- Cook, C. A. See Light, A. E.
- Cook, E., superconductors; phenomenological theory, I, 405. Superconductors; complete data and boundary conditions, I, 405.
- Cook, E. B. See Murphy, J. N.
- Cook, E. N. See Pool, T. L.
- Cook, E. S., and Hill, A. J., local anaesthetics derived from tetrahydronaphthalene; esters of [1:2-dialkylamino-3-hydroxy-1:2:3:4-tetrahydronaphthalene, (II)] 1-dialkylamino-2-hydroxy-1:2:3:4-tetrahydronaphthalene, II, 344.
- and Kreke, C. W., formation of bis- β -diethylaminoethyl sulphide, II, 3. Dialkylaminoalkyl furates and benzoates as topical anaesthetics, II, 344. Respiratory activity of steam-distillate from yeast, III, 537. Malt culms as source of respiratory factors for yeast and skin, III, 537.
- and Morgan, M. N., effect of saturated fatty acids on respiration of baker's yeast, III, 261.
- and Walter, E. M., charcoal as adsorbent for respiratory factors, III, 537. Solubility behaviour of respiratory factors from yeast, III, 537.
- Walter, E. M., and Eilert, M. R., effect of amino-acids, of vitamin-B complex, and other compounds on respiration of bakers' yeast, III, 932.
- See also Schroeder, M. P.
- Cook, F., rapid operating device for Orsat apparatus, I, 42.
- Cook, G. M. See Mitchell, H. S.
- Cook, J. W., cancer-producing chemical compounds, III, 506.
- and Engel, L. L., colchicine and related compounds. II. Synthesis of a simple analogue of *N*-acetylcolchicinol methyl ether, II, 144.
- and Kennaway, E. L., chemical compounds as carcinogenic agents, second supplementary report: literature of 1938 and 1939, III, 853.
- Kennaway, E. L., and Kennaway, N. M., production of tumours in mice by deoxycholic acid, III, 669.
- and Martin, R. H., polycyclic aromatic hydrocarbons. XXIV., II, 343.
- and Robinson, A. M., polycyclic aromatic hydrocarbons. XXIII., II, 212.
- See also Badger, G. M., Cohen, Aaron, and Dorfman, R. I.
- Cook, L. G. See Bretscher, E.
- Cook, L. O., mercury recording thermometer for use over long periods of time, I, 329.
- Cook, M. M. See Bellis, C. J.
- Cook, R. P., and McCullagh, G. P., comparative study of cholesterol metabolism and its relation to fatty infiltration, with particular reference to cholesterol atheroma, III, 238.
- Cook, T. H. See Gilman, H.
- Cooke, B. See Hurst, E. W.
- Cooke, H. G., jun. See Fuson, R. C.
- Cooke, R. A., Hampton, S., Sherman, W. B., and Stull, A., allergy with tetanus toxoid, III, 829.
- See also Sherman, W. B.
- Cooke, R. G., Macbeth, A. K., and Swanson, T. B., carbonyl constituents of eucalyptus oils. III. Constitution of phellandral; *d*-, *l*-, and *dl*- (synthetic) -phellandric acids, II, 283.
- Cool, R. D., microchemical kits, I, 421.
- Cooley, R. A., and Yost, D. M., rate of exchange of elementary radiol sulphur with sulphur monochloride, I, 414.
- See also Kalbfell, D. C., and Stevenson, D. P.
- Cooley, T. B. See Carey, B. W.
- Coolidge, T. B., chemistry of the van den Bergh reaction, III, 312.
- Coombs, (Miss) E., and Evans, D. P., condensations of carbonyl compounds; reaction of acetophenone with benzaldehyde, I, 414.
- Coombs, F. S., Pecora, L. F., Thorogood, E., Consolazio, W. V., and Talbott, J. H., renal function in patients with gout, III, 586.
- See also Talbott, J. H.
- Coombs, H. A., Mt. Baker [Washington], a cascade volcano, I, 181.
- See also Goodspeed, G. E.
- Coon, J. M., and Rothman, S., nature of sweat response to drugs with nicotine-like action, III, 110. Nature of pilomotor response to acetylcholine, III, 110. Nature of pilomotor response to acetylcholine; pharmacodynamics of skin, III, 522.
- See also Rothman, S.
- Coop, I. E. See Brockway, L. O., and Hugill, J. A. C.
- Cope, R., and Burrows, R. G. R., epanutin in epilepsy, III, 524.
- Cooper, B. B. See Fickling, B. W.
- Cooper, D., fine structure in directional intensity of cosmic rays, I, 400.
- Cooper, E. P., and Morrison, P., internal scattering of γ -rays, I, 309.
- Cooper, F. B., Gross, P., and Lewis, M., sulphanilamide derivatives of heterocyclic amines, III, 329. Chemotherapeutic evaluation of N^4 -*n*-acyl-sulphanilylhydroxamides, III, 756.
- See also Gross, P.
- Cooper, F. S. See Whelden, R. M.
- Cooper, G. R. See Neurath, H.
- Cooper, J. A., and Garner, W. E., dehydration of crystals of chrome alum, I, 224.
- Cooper, K. A. See Bateman, L. C.
- Cooper, K. E., Hapgood, F. C., Johnstone, K. I., McLeod, J. W., Woodcock, H. E. de C., and Zinnemann, K. S., laboratory diagnosis of diphtheria, III, 770.
- Cooper, M. L., and Grabill, F. J., apparatus for preservation of bacterial cultures in dried state, III, 172.
- Cooper, Z. K., mitotic rhythm in human epidermis, III, 180.
- and Franklin, H. C., mitotic rhythm in epidermis of mouse, III, 876.
- Cooperstock, M., congenital enlargement of extremities, III, 277.
- Coops, J. See Mendel, H.
- Cope, A. C., and Hardy, (Miss) E. M., introduction of substituted vinyl groups. V. Rearrangement involving migration of an allyl group in a three-carbon system, II, 152.
- Cope, A. C., Hartung, W. H., Hancock, (Miss) E. M., and Crossley, F. S., introduction of substituted vinyl groups. IV. Primary α -alkenylalkylmalonic esters, II, 152. Substituted vinylbarbituric acids. IV. Derivatives containing a primary Δ^1 -alkenyl group, II, 290.
- Cope, O., and Kapnick, I., relation of endocrine function to resistance and immunity, III, 894.
- MacMahon, C. E., Hagströmer, A., and Thompson, R. H., gastric secretion [preparation of gastric pouch], III, 663.
- and Schatzki, R., tumours of adrenal glands, III, 409.
- Copeland, C. S. See Williams, D. T.
- Copenhaver, J. E. See Feagan, R. A., jun.
- Copenhaver, W. M. See Detwiler, S. R.
- Copley, A. L., specificity of thrombin action, III, 10.
- Copley, D. M. See Barthen, C. L.
- Copley, G. N., mesomerism and the uncertainty principle, I, 347. Rotation of projection formulae, I, 430. "Isosteric parachors," I, 431. Representation of the benzene ring, II, 325.
- Copley, M. J., Marvel, C. S., and Ginsberg, E., hydrogen bonding by S-H. VII. Aryl mercaptans, II, 14.
- and Spence, R. W., contact potential of an iodine film on tungsten, I, 23.
- Zellhoefer, G. F., and Marvel, C. S., hydrogen bonds involving the C-H linking. VIII. Solubilities of completely halogenated methanes in organic solvents. IX. Nitriles and dinitriles as solvents for hydrogen-containing halogenated methanes, I, 108.
- See also Marvel, C. S.
- Copp, F. C., and Simonsen, J. L., experiments on synthesis of 1:2-dimethylcyclohexylacetic acid, II, 219.
- Coppée, G., differential sensitivity of ear to two high-pitch sounds, III, 400.
- See also Monnier, A. M.
- Coppen, F. M. V. See Blair, G. W. S.
- Coppens, L., mechanism of combustion of methane, I, 330.
- Coppoc, W. J. See Weiser, H. B.
- Coppock, J. B. M., compressibilities and expansion coefficients of gases at low pressures, and their relation to molecular volume, I, 65.
- and Goss, F. R., polarisations and related data of optically active and racemic β -octanol, II, 3.
- Corazza, M., antagonism of tetraethylammonium camphorsulphonate towards the effects of chloral hydrate and ethyl urethane on isolated toad's heart, III, 64. Distribution of chloride in organism after intravenous injection of hypertonic solutions of sodium chloride, III, 335.
- Corbell, R. L., jun. See Haag, H. B.
- Corbellini, A., dehydrogenating action of thieryl chloride, II, 194.
- Corberi, E., acidoproteolytic cocci (Gorini), III, 167.
- Corbet, R. E. See Holmes, H. N.
- Corbett, L. J., assessment of physical fitness, III, 340.
- Corbin, K. B., and Hinsey, J. C., influence of nervous system on bone and joints, III, 551.
- Corbould, I., Clark, R. H., and McKeechie, R. E., intravenous feeding of amino-acids, III, 231.

- Corcoran, A. C., and Page, I. H., effects of renin, pitressin, and pitressin and atropine on renal blood flow and clearance, III, 137.
See also Page, I. H.
- Cordebar, H., titrimetric determination of organic substances by chromic oxidation; use of stable nitro-chromic solutions, II, 31.
- Cordes, F. C., and Harrington, D. O., asthenopia due to vitamin-A deficiency, III, 399.
and Hogan, M. J., angiomatosis retinae (Hippel's disease); report of case in which Roentgen therapy was used in an early stage, III, 490.
- Cordier, D., and François, J., changes in respiratory function of blood in experimental pulmonary oedema, III, 195.
Oxygen capacity of blood and resistance to progressive anoxaemia, III, 388.
- Cordier, R., permeability of vitelline sack in young trout to acid dyes, III, 179.
Existence of polarised athrocytes in posterior intestine of young trout, III, 374.
- Gérard, P., and Lison, L., discriminative athrocytosis, III, 374.
- Corelli, F., conserving blood for transfusion purposes, III, 378.
- Corey, E. L., sex-specificity in action of progesterone on adrenalectomised cats, III, 124.
- Cori, C. F., glycogen breakdown and synthesis in animal tissues, III, 433.
See also Colowick, S. P., and Cori, G. T.
- Cori, G. T., and Cori, C. F., activating effect of glycogen on enzymic synthesis of glycogen from glucose 1-phosphate, III, 165.
Kinetics of enzymic synthesis of glycogen from glucose 1-phosphate, III, 932.
- Cork, J. M., and Bartunek, P. F., photographic registration of heavy particles emitted during bombardment, I, 427.
and Halpern, J., relative probability for loss of neutrons and α -particles from an excited nucleus, I, 277.
- Halpern, J., and Tatel, H., production of radium-E and radium-F (polonium) from bismuth, I, 186.
- and Middleton, W., simultaneous emission of three particles from an excited nucleus, I, 426.
See also Curtis, B. R., Lawson, J. L., Tape, G. F., and Thornton, R. L.
- Corkill, A. B., and Nelson, J. F., effect of fructose on peripheral utilisation of glucose, III, 918.
- Corley, R. C. See Clarke, F., Neilson, E. K., and Wolf, P. A.
- Cornbleet, T., cutaneous carbohydrates. I. Normal skin, III, 420.
and Barnes, B., hormones and acne vulgaris. I. Urinary assay for and therapeutic use of androgen, III, 33.
Androgenic substance and sweat, III, 582.
- Slepyan, A. H., and Ebert, M. H., colloidal calomel ointment, III, 247.
- Cornea, (Miss) J. See Velculescu, A. I.
- Corner, J., interaction between nitrogen molecules, I, 348.
Explanation of a rule for critical temperatures, I, 353.
Distribution function of a simple liquid model, I, 435.
- Cornevin, S. See Mathieu, J. P.
- Cornog, J., and Olson, L., device for subliming iodine, I, 42.
- Corone, A., sodium ricinoleate and methylcne-blue insufflated for tympanosclerosis, III, 491.
- Coronini, C., cultivation of tubercle bacilli from blood, organs, secretions, and excreta, III, 772.
- Corper, F. J., osteochondritis ischiopubica in childhood, III, 551.
- Corper, H. J., and Colin, M. L., histaminase and histamine poisoning, III, 925.
- Cohn, M. L., and Bower, C., growth of human tubercle bacilli on non-protein synthetic medium, III, 689.
- Cohn, M. L., and Damerow, A. P., specific immunity, allergy, and anaphylaxis in tuberculosis, III, 828.
- Corrigan, K. E., physical factors influencing difference between 200 and 500 kv. radiation, III, 825.
See also Reynolds, L.
- Corsaro, J. F., Mangun, G. H., and Myers, V. C., creatine content of muscle in human disease, III, 888.
- Corse, J. See Fuson, R. C.
- Corson, B. B. See Ipatiev, V. N.
- Corson, D. R., MacKenzie, K. R., and Segrè, E., possible production of radioactive isotopes of element 85, I, 186.
- Corteggiani, E., and Serfaty, A., acetylcholine and choline-esterase in insects and arachnids, III, 226.
- Corwin, A. H. See Paden, J. H.
- Corwin, W. C., relationship of insulin hypoglycæmic reaction to shock, III, 209.
Mechanism of insulin convulsions, III, 299.
Convulsions of insulin hypoglycæmia in relation to water balance, III, 801.
See also Ingle, D. J., and Rake, G.
- Coryell, C. D., and Pauling, L., structural interpretation of acidity of groups associated with the hæms of hæmoglobin and derivatives, III, 343.
- Pauling, L., and Dodson, R. W., magnetic properties of intermediates in reactions of hæmoglobin, I, 15.
- Cosel, H. von. See Winterfeld, K.
- Cosman, B. J. See Dresser, R.
- Cosslett, V. E., resolving power of magnetic electron lens used as a β -ray spectrometer, I, 336.
- Costa, H., secondary production of electrons through photo-effect in a non-self-dependent hydrogen discharge, I, 2.
- Costeanu, V. See Neumann, A.
- Costello, M. J., and Shepard, J. H., supernumerary external ears, III, 26.
- Cosyns, H., absorption of ferrous chloride in different pathological states, III, 282.
- Cosyns, M. G. E., barometric coefficient of extensive cosmic-ray showers, I, 279.
- Coteen, H. See Snyder, F. F.
- Cotti, L., hæmoglobin and porphyrin during anæmia, III, 375.
Metabolism of coproporphyrin-I and erythropoiesis, III, 703.
- Cottini, G. B., and Mazzone, G. B., effects of 3:4-benzpyrene on human skin, III, 44.
- Cotton, F. S., respiration. I and II, III, 388.
- Cottrell, C. L. See Romanoff, A. L.
- Co-Tui, F. W., and Schriff, M. H., production of pyrogen in sera by bacteria, III, 355.
Schriff, M. H., and Ruggiero, W. F., production of pyrogen in gum acacia by bacteria, III, 9.
- Couch, J. F., lupine. XIV. Isolation of anagryne from *Lupinus laziflorus*, var. *silvicola*, C. P. Smith. XV. Alkaloids of *Lupinus sericeus*, Pursh. XVI. Isolation of nonalupine from *Lupinus andersonii*, Wats., II, 111, 197; III, 618.
See also Moran, E. A.
- Coujard, R. See Champy, G.
- Coulson, C. A., lengths of the links of unsaturated hydrocarbon molecules, I, 60.
Energy in unsaturated hydrocarbon molecules, I, 284.
and Rushbrooke, G. S., atomic distribution curves for liquids, I, 99.
Molecular orbitals, I, 284.
See also Everett, D. H., and Rushbrooke, G. S.
- Coulson, E. J. See Spies, J. R.
- Coulter, L. V., and Latimer, W. M., heat of solution of gadolinium sulphate octahydrate and entropy of the gadolinium ion, I, 441.
- Coumoulos, G. See Karagunis, G.
- Courmand, A. See Darlin, R. C.
- Courtade, R. See Urbain, A.
- Courtice, F. C., Douglas, C. G., and Priestley, J. G., adrenaline and muscular exercise, III, 67.
- Courtice, R. See Lee, D. H. K., and Robinson, K. W.
- Courtois, J., and Manouvrier, J., specificity and action of sweet almond phosphatase. II. Effect of various compounds on hydrolysis of different substrates, III, 73.
See also Levy-Bruhl, M.
- Couteaux, R., and Nachmansohn, D., changes of choline-esterase at end plates of voluntary muscle following section of sciatic nerve, III, 480.
- Coutts, E. N. See Hawkins, S. J.
- Covell, W. P., experimental studies on enchondral bone of otic capsule, III, 205.
Pathologic changes in peripheral auditory mechanism due to avitamineses (A, B complex, C, D, and E), III, 845.
- Cowan, A. See English, B. C.
- Cowan, C. R. See Solandt, D. Y.
- Cowan, D. M., Jeffery, G. H., and Vogel, A. I., physical properties and chemical constitution. IV. Methylcyclohexane; multiplanar structure of the methylcyclohexane ring. V. Alkyl ketones, I, 148; II, 39.
- Cowan, J. C. See Marvel, C. S.
- Coward, K. H., and Kassner, E. W., determination of vitamin-D in food substances containing phosphorus, III, 516.
- Cowell, E. M., chemical warfare, III, 254.
See also Killick, E. M.
- Cowgill, G. R., need for vitamin-B, supplement to staple American foods, III, 428.
- Cowie, A. T. See Barcroft, J.
- Cowper, R. M., and Stevens, T. S., mechanism of reaction between arylamines and benzoins, II, 177.
See also Kent, A.
- Cox, E. G. See Brown, C. J.
- Cox, E. H., sulphonamide derivatives of arylcarbamides, II, 214.
- Cox, F. W., and Adkins, H., relative oxidation potentials of ketones, II, 90.
- Cox, G. J., Matuschak, M. C., Dixon, S. F., and Walker, W. E., mottled enamel in rat molars, III, 86.
See also Dixon, S. F.
- Cox, H. E., dermatitis in the courts: idiosyncrasy and supersensitivity, III, 762.
- Cox, H. R., filter-passing infectious agent isolated from ticks, III, 268.
and Bell, E. J., cultivation of *R. diaporica* in tissue culture and in tissues of developing chick embryos, III, 467.
- Cox, R. T. See Chase, C. T.

- Cox, W. M., jun., and Mueller, A. J., nitrogen retention on cascin digests, III, 318.
See also Mueller, A. J.
- Cox, W. W. See Wendel, W. B.
- Coy, N. H. See Bergeim, F. H.
- Coyner, E. C. See Price, C. C.
- Cozen, L., postural correction in children; analysis of 48 patients, III, 873.
- Crabb, E. D., halowax-paraffin for infiltrating histologic tissues, III, 702.
- Crabtree, C., sex differences in structure of Bowman's capsule [of kidney] in mouse, III, 666.
- Crabtree, D. G., Ward, J. C., and Welch, J. F., sex differences in rats to toxic doses of red squill, III, 212.
See also Ward, J. C.
- Crabtree, H. G., influence of solvent on rate of induction of epithelial skin tumours in mice, III, 911.
- Cracium, E. C., Zugravesco, I., and Stefu, L., carcinogenic action of well-defined chemical substances, III, 422.
- Craft, C. B. See Baker, A. B.
- Crafton, H. C., jun. See Brooks, D. B.
- Crafts, A. S., solute transport in plants, III, 172.
- Crafts, R. C. See Engle, E. T., and Leatham, J. H.
- Cragg, R. W., and Osterberg, A. E., nicotine poisoning in a child, III, 928.
- Crabo, F. H. See Spink, W. W.
- Craig, A., testing of chemical balances, I, 42.
- Craig, D. N., and Vinal, G. W., thermodynamic properties of sulphuric acid solutions and their relation to electromotive force and heat of reaction of the lead storage battery, I, 324.
- Craig, F. N. See Muus, J.
- Craig, J. D., and Scheuer, L. A., Vollmer patch test as routine procedure, III, 605.
- Craig, J. S. See Hetherington, D. C.
- Craig, L. C., and Jacobs, W. A., veratrine alkaloids. VII. Decevinic acid, II, 316.
- Craig, W. McK., surgical treatment of hypertension, III, 293.
and Smith, H. L., surgical treatment of hypersensitive carotid sinus reflexes, III, 101.
See also Foley, M. P.
- Craige, A. H., jun., relationship between salivary output and intestinal effects with carbamylcholine chloride (lentin), III, 769.
- Craigie, E. H., cerebral cortex in Tinamidæ, III, 719.
- Craik, K. J. W., origin of visual after-images, III, 490. Transmission of light by eye media, III, 638.
and Zangwill, O. L., observations relating to threshold of small figure within contour of closed-line figure, III, 117.
- Cramer, F. B., Hockett, R. C., and Purves, C. B., unesterified secondary hydroxyl [groups] in acetone-soluble cellulose, II, 69.
and Purves, C. B., unesterified primary hydroxyl [groups] in acetone-soluble cellulose, II, 69.
- Cramer, G., and Fuschel, E., left-sided so-called aortic ventricle, a rare malformation of the heart, III, 884.
- Cramer, H. See Seger, G.
- Cramer, P. L., and Miller, V. A., thermal decomposition of $\beta\beta$ -dimethyl- γ -amyl acetate, II, 295.
See also Winter, P. K.
- Cramer, R. See Jacobs, T. L.
- Cramer, W., hormonal ætiology of breast cancer, III, 589.
and Horning, E. S., association between brown degeneration of adrenals and incidence of mammary cancer in inbred strains of mice, III, 227.
- Crampton, C. B. See Schneider, E. C.
- Crandall, L. A., jun., [determination of] acetone bodies in blood; application to determination of small amounts of mercury, III, 562. Form in which acetone bodies are produced by the liver, III, 851.
- Chesley, F. F., Hansen, D., and Dunbar, J., relationship of P-P factor to intestinal mobility, III, 52.
See also Chesley, F. F., and Murer, H. K.
- Crane, A. R. See Mallory, G. K.
- Crane, H. R., radioactive isotopes in physiology and biology, III, 240.
Halpern, J., and Oleson, N. L., γ -rays from beryllium and nitrogen bombarded with deuterons, I, 90.
Oleson, N. L., and Chao, K. T., energy loss of electrons in carbon and decay of the mesotron, I, 280.
See also Slawsky, M. M.
- Crane, N. F. See Stewart, H. J.
- Cranston, E. M., and Bieter, R. N., prevention of blood pressure fall during spinal anaesthesia in the rabbit, III, 335.
See also Bieter, R. N.
- Cranston, J. A. See Brown, H. F.
- Craven, E. C., vapour pressure of glycerin, I, 406.
- Craver, L. F., lymphomas, leukaemias, and allied disorders in children, III, 46.
See also Woodard, H. Q.
- Crawford, A. B., action of amines on semicarbazones, II, 214.
and Beach, B. A., ineffectiveness of proprietary remedies and other drugs in control of Bang's disease, III, 922.
- Crawford, A. S., ventricular puncture and studies in cerebral pneumography, III, 113.
- Crawford, B. H., ocular interaction in relation to measurements of brightness threshold, III, 575. Effect of field size and pattern on change of visual sensitivity with time, III, 640.
- Crawford, B. L., jun., partition functions and energy levels of molecules with internal torsional motions, I, 198. Infrared and Raman spectra of polyatomic molecules. XII. Methylacetylene, I, 345. Hindered rotation in methyl alcohol, I, 435.
- Crawford, C. L., nomograph for the Clausius-Clapeyron equation, I, 435.
- Crawford, D. P. See Wilkins, T. R.
- Crawford, G. N. C., evolution of Haversian pattern in bone, III, 177.
- Crawford, (Miss) H. M., reaction between 2:3-dimethyl-1:4-naphthaquinone and magnesium phenyl bromide. II, II, 82.
- Crawford, J. H. See Gubner, R.
- Crawford, M. F., McLay, A. B., and Crooker, A. M., spectrum of doubly-ionised lead, I, 381.
- Crawford, R. B., and Lindwall, H. G., ethanalamines of the oxindole series, II, 105.
- Crawford, T., causation of low blood-sugar curve in coeliac disease, III, 57. Carbohydrate tolerance in hypothyroidism and hyperthyroidism, III, 846.
- Craxford, S. R., electrochemistry of simple interphases, with special reference to that between mercury and solutions of electrolytes, I, 110.
- Creaser, C. W., and Gorbman, A., species specificity of gonadotropic factors in vertebrates, III, 494.
- Crede, R. H., and Moon, H. D., effect of adrenotropic hormone on thymus of rat, III, 495.
- Credner, K. See Holtz, P.
- Creech, E. M. H., carcinogenic and related non-carcinogenic hydrocarbons in tissue culture. II., III, 815.
- Creech, H. J., and Jones, R. N., conjugation of horse serum-albumin with 1:2-benzanthrylcarbidimides, III, 911.
See also Fieser, L. F.
- Creely, J. W., and Le Compte, G. C., pressure gradient fractionation of gases, I, 217.
- Creevy, C. D., and Rea, C. E., treatment of impotence by male sex hormone, III, 901.
- Creevy, J. A. See Brick, R. M.
- Creighton, H. B. See Avery, G. S., jun.
- Creighton, M. M. See Anderson, R. J.
- Cremer, H. D., determination of plasma-alkali reserve, III, 12.
and Opitz, E., determination of urinary ammonia using Lang's distillation apparatus, III, 587.
- Crenshaw, C. M. See Myers, F. E.
- Cressman, R. D., and Benz, E. W., nerve action potentials in experimental traumatic shock, III, 636.
and Rigdon, R. H., capillary permeability and inflammation in narcotised rabbits, III, 632.
See also Blalack, A.
- Creutz, E. C., proton-proton scattering data, I, 5.
- Delsasso, L. A., Sutton, R. B., White, M. G., and Barkas, W. H., radioactivity produced by proton bombardment of bromine and iodine, I, 426.
See also Barkas, W. H.
- Crew, F. A. E., and Auerbach, C., linkage data on Rex character in house mouse, III, 373.
and Lamy, R., spontaneous inverted exchange between X and Y in *Drosophila melanogaster*, III, 465.
- Crews, L. T., Hart, J. P., and Everett, M. R., isolation of keturonic acids. II., II, 153.
See also Dermer, O. C.
- Crider, J. O., and Thomas, J. E., difference in effect of distilled water and isotonic solutions in intestine on pancreatic secretion, III, 742.
See also Thomas, J. E.
- Criegee, R., and Beucker, H., iodoso-compounds as oxidation agents, II, 43.
- Pilz, H., and Flygare, H., olefine peroxides, II, 82.
- Crigler, C. W. See Zon, L.
- Crigler, E. F. See Hellebrandt, F. A.
- Crile, G., intrathoracic goitre, III, 29.
- Coeliac ganglionectomy for Raynaud's disease, III, 885.
- Crile, G. W., and Quiring, D. P., Indian and Eskimo metabolisms, III, 326. Metabolism of the Maya Quiché Indian, III, 326.
- Crimm, P. D., and Short, D. M., vitamin-A content of human liver in tuberculosis, III, 427.
- Crimmins, E., and Pound, J. R., reaction between arsenite and permanganate solutions, I, 38.

- Crippa, G. B., 1-amino-2-methylantranthraquinone in relation to phthaloylation and Schiff's base, II, 227.
- and Maffei, S., biochemical catalysts. VI. Stereoisomerism as affecting substances modifying pepsin proteolysis *in vitro*, III, 609.
- and Maffei, S. [with Wylde, E.], biochemical catalysts. V. Urea derivatives modifying peptic proteolysis, III, 261.
- Crismier, R., determination of conjugated glucuronic ethers in mammalian blood, III, 275. Photometric determination of conjugated glucuronides, III, 275. Preparation of borneolglucuronic acid, III, 421. Determination of pregnenediolglucuronic acid in urine, III, 658.
- See also Florkin, M.
- Crist, J. W., photosynthesis in mutational barrenness of Montmorency cherry, III, 547.
- Cristiani, M., antidoting the effects of mustard gas on respiratory tract by intratracheal injection, III, 337.
- Cristoly, P., Fourcade, J., and Bénézech, C., effect of *in vitro* addition of sodium chloride to blood; variation in the corpuscle-plasma ratio; permeability of cells to chloride, III, 288.
- Critchfield, C. L., and Lamb, W. E., jun., field theory of nuclear forces, I, 343.
- Crittenden, E. C., jun., β -ray spectra of ^{27}Mg , ^{62}Cu , and nuclear isomerides of ^{104}Rh , I, 4.
- Crittenden, P. J., effects of anaesthetics on response of submaxillary and pancreatic glands to prostigmine and physostigmine, III, 37.
- Croatto, U. See Bezzi, S. and Grube, G.
- Croft, C. C. See Greene, R. A.
- Croft, J. D., and Snorf, L. D., ascorbic acid deficiency, III, 235.
- Crohn, B. B., and Yarnis, H., anatomical position of ileum in health and disease, III, 371.
- Croisier, M. See Studer, A.
- Cromwell, H. A. See Richards, D. W., jun.
- Cromwell, N. H., $\alpha\beta$ -unsaturated α - and β -dialkylamino-ketones, II, 310.
- Croneis, C., and Grubbs, D. M., Silurian sea balls, I, 85.
- Cronheim, A. See Levinson, S. O.
- Crook, G. W. See Winters, M.
- Crook, W. J., Cunningham, J. R., and Cady, J. R., magnesite crucible, I, 176.
- See also Négresco, T.
- Crooke, A. C., and Callow, R. K., differential diagnosis of forms of basophilism (Cushing's syndrome), particularly by estimation of urinary androgens, III, 28.
- Crooker, A. M. See Crawford, M. F.
- Crooks, H. M. See Marker, R. E.
- Crosbie, A., and Scarborough, H., stored blood. II. Leucocytes, III, 839.
- Crosnier, R., standardisation of fixation of the complement reactions by standardisation of preliminary titrations, III, 269.
- Cross, A. R. See Taylor, H. M.
- Cross, L. B. [with Henze, H. R.], use of alkoxy-ketones in synthesis of quinolines by the Pfitzinger reaction, II, 24.
- Cross, L. C., Eliot, C. G., Heilbron, I. M., and Jones, E. R. H., constituents of higher fungi. I. Triterpene acids of *Polyporus betulinus*. Fr., II, 256.
- Crossley, F. S., Miller, E., Hartung, W. H., and Moore, M. L., thiobarbiturates. III. *N*-Substituted derivatives, II, 290.
- See also Cope, A. C.
- Crossley, M. L., chemical constitution and reactivity. I. Effect of isomerism on reactivity of diazo- and related azo-compounds, II, 165. Chemotherapy, III, 755.
- Kienle, R. H., and Benbrook, C. H., apparatus for continuous automatic measurement of evolved gas, I, 302. Chemical constitution and reactivity. I. Phenylidiazonium chloride and its mono-substituted derivatives, I, 364.
- Northey, E. H., and Hultquist, M. E., sulphanilamide derivatives. V. Constitution and properties of 2-sulphanilamidopyridine. VI. Substituted N^1 -aliphatic sulphanilamides. VII. N^1 -Alkanesulphonylsulphanilamides and related compounds, II, 164, 188, 304.
- See also Climenko, D. R.
- Crosson, J. W., Jones, R. R., and Sayers, R. R., helium-oxygen mixtures for alleviation of tubal and sinus block in compressed air workers, III, 887.
- Crouch, R. L., efferent thalamic fibres of *Macacus rhesus*. II. Anterior and medial nuclei and pulvinar and additional observations on ventral nuclei, III, 716.
- Crowden, G. P. See Killick, E. M.
- Crowe, M. O' L., fluorescence and absorption spectra of flavin isolated from a toxic culture filtrate of *C. diphtherie*, III, 263.
- Crowe, S. J., and Guild, S. R., impaired hearing for high tones, III, 117.
- Crowell, M. L. See Inman, O. L.
- Crowley, W. R., and Spiher, A. T., iodo-fluoride method for determination of copper; effects of antimony, aluminium, and calcium, I, 269.
- Yost, D. M., and Roberts, J. D., catalytic effect of osmium compounds on the reduction of perchloric acid by hydrobromic acid, I, 415.
- Crowfoot, (Miss) D., and Riley, D., X-ray measurements on wet insulin crystals, I, 100.
- Crowley, G. P., Milton, G. J. G., Reade, T. H., and Todd, W. M., action of nitrous acid on tertiary amines; influence of acidity, II, 340.
- Crowley, J. H. See Nigg, C.
- Crowley, N., and Taylor, S., iron-resistant anaemia and latent rickets in school children, III, 182.
- Crowther, J. A., Liebmman, H., and Jones, R., action of ionising radiations on electrophoretic mobility of colloid particles, I, 255.
- Crozier, W. J., theory of the visual threshold. I. Time and intensity. II. Kinetics of adaptation, III, 639. Relation between birth weight and litter size in mice, III, 662.
- and Holway, A. H., theory and measurement of visual mechanisms. III, III, 116.
- and Wolf, E., flicker response contour for the frog, III, 25. Temperature and critical illumination for reaction to flickering light. IV. Critical thermal increments and theory of response contour. V. *Xiphophorus*, *Platyphocilius*, and their hybrids. VI. Flash duration varied, III, 25, 575, 639. Flicker response for the crayfish. I, III, 117. Flicker-response curve for *Fundulus*, III, 723. Reaction to visual flicker in newt *Triturus*, III, 723.
- Cruikshank, D. B., natural occurrence of zinc in teeth. III. Variations in tuberculosis, III, 504.
- Cruikshank, J. See Howie, J. W.
- Cruikshank, R., bacteriology of infected wounds, III, 687.
- Crum, G. E. See Bracken, M. M.
- Crutchfield, W. G., and Meredith, J. M., cranial and intracranial procedures for control of intradural hypertension during operations for infiltrating brain tumours, III, 113.
- Csinády, E. von, and Szobonya, M., asymmetrical development of body resulting from work and sport, III, 340.
- Csonka, F. A., amino-acids in maize kernels, III, 548.
- Cuboni, E., biological diagnosis of pregnancy in cows, III, 128.
- Cueto, A. A. See Loofbourow, J. R.
- Cuff, J. R. See Quinlan, W. S.
- Cullen, G. E., treatment of pneumonia in infants and children, III, 520.
- See also Goldman, L., and Wilson, A. T.
- Culler, E. A. See Smith, C. G.
- Cullinane, N. M., and Rees, W. T., isomorphous relationships of organic compounds of analogous constitution, II, 196.
- Culmann. See Libessart.
- Culmer, C. U., Gray, J. S., Adkison, J. L., and Ivy, A. C., origin of urogastrone, III, 415.
- See also Gray, J. S.
- Culpepper, C. W., and Moon, H. H., effect of temperature on elongation of stems of asparagus under field conditions, III, 456.
- Culpepper, W. L. See Hutton, J. H.
- Culton, T. G. See Bird, H. R.
- Cummings, J. N., rôle of potassium in myasthenia gravis, III, 713.
- and Maas, O., blood changes in dystrophia myotonica, III, 635.
- Cumley, R. W., and Irwin, M. R., differentiation of sera of two species of doves and their hybrid, III, 838.
- Cumming, H. See Laymon, C. W.
- Cumming, W. M. See Boyle, J. L.
- Cummings, R. W. See Reed, J. F.
- Cummins, H., finger prints correlated with handedness, III, 625.
- Cummins, J. A., treatment of mental illnesses with metrazol, III, 201.
- Cummins, S. L., augmentation of action of anthracite and other dusts by dead tubercle bacilli, III, 445.
- Cunningham, B. See Baum, R., and Williams, W. L.
- Cunningham, J. G., industrial hygiene in Province of Ontario, III, 256.
- See also Barrett, H. M.
- Cunningham, J. R. See Crook, W. J.
- Cunningham, M. M., and Slater, E. C., vitamin-A and -D content of Australian fish-liver oils, III, 321.
- Cunningham, R. See Sharpe, J. C.
- Cunnold, F. A., effective wave-length to be used in calibrating a disappearing-filament optical pyrometer, I, 40.
- Cuny, L., and Quivy, D., toxicity of acetonitrile for rats, III, 337.
- Cupp, S. B., and Rogers, H. E., viscosity of solutions of sulphur dioxide in organic liquids, I, 106.
- Cupps, P. T. See Turner, C. W.
- Curatolo, A., distribution of intravenously injected silver in organs, III, 151. Influence of tissue autolysates on uptake of silver by animal organs, III, 761.
- Curie, (Mme.) I., and San-Tsiang, T., radiations from radioactive isotopes of the rare earths formed in uranium and thorium, I, 90.
- Curneen, E. C. See MacLeod, C. M.

- Curnen, E. C. See Farr, L. E.
- Curran, H. R., and Evans, F. R., sensitising bacterial spores to heat by exposing them to ultra-violet light, III, 933.
- Curran, S. C., Dee, P. I., and Strothers, J. E., measurements of γ -ray energies, I, 186.
- and Strothers, J. E., photo-emission in Geiger-Müller counters, I, 51. Bombardment of nitrogen and oxygen with protons, I, 140. Radioactivity of the fluorine isotope of mass 20, I, 278.
- Currie, G. M., atropine in congenital complete heart-block, III, 792.
- Currier, A. J., catalytic reactions, I, 416.
- Curry, E., histology of digestive tube of *Cyprinus carpio*, III, 785.
- Curschmann, H., anterior hypophysis and kidney function, III, 642.
- Curth, H. O., and Slanetz, C. A., acanthosis nigricans and cancer of liver in dog, III, 45.
- Curtis, A. C., and Ballmer, R. S., prevention of carotene absorption by liquid petrolatum, III, 134.
- and Horton, P. B., utilisation of vitamin-A added to mineral oil, III, 817.
- and Pollard, H. M., Felty's syndrome compared with other forms of rheumatoid arthritis, III, 745.
- See also Brazier, J. G., and Smith, K. M.
- Curtis, B. R., and Cork, J. M., β -radiation from activated isotopes of arsenic, I, 339.
- and Richardson, J. Reginald, radiations from radioactive ^{119}In , I, 339.
- Curtis, G. H., and Netherton, E. W., cutaneous hypersensitivity to triethanolamine, III, 604.
- Curtis, G. M. See Davison, R. A., Greenfield, J., Klassen, K. P., and Matthews, N. L.
- Curtis, H. J., cerebellar action potentials in response to stimulation of cerebral cortex, III, 844.
- and Cole, K. S., membrane action potentials from the squid giant axon, III, 568.
- See also Dean, R. B.
- Curtis, M. R. See Dunning, W. F.
- Curtiss, L. F., radium exposure meter, I, 41. Internal absorption of γ -rays in radium-beryllium neutron sources, I, 52.
- Astin, A. V., Stockmann, L. L., and Brown, B. W., cosmic-ray observations in the stratosphere with high-speed counters, I, 54.
- Goodman, C., Kovarik, A. F., Lind, S. C., Piggot, C. S., and Evans, R. D., radioactive standards, I, 185, 376.
- Cushman, M. See Butler, A. M.
- Cusick, P. L., Benson, O. O., jun., and Boothby, W. M., effect of anoxia and high concentrations of oxygen on retinal vessels, III, 841.
- Cusmano, S., transformation of isooxazole-3-carboxylic acids into pyrazole derivatives. I.—VI., II, 55, 194, 291.
- See also Ajello, T.
- Cuthbertson, D. P., McCutcheon, A., and Munro, H. N., relationship of carbohydrate metabolism to protein metabolism. II. Effect of separation in time of protein and carbohydrate moieties of diet of adult and growing rat, III, 748.
- Cuthbertson, W. F. J., Ridgeway, R. R., and Drummond, J. C., fate of tocopherols in the animal body, III, 236.
- Cutler, E. C. See Bailey, O. T.
- Cutting, R. A., Larson, P. S., and Lands, A. M., cause of death resulting from massive infusions of isotonic solutions, III, 186.
- Cutting, W. C., and Kuzell, W. C., further results with various agents in experimental hyperthyroidism, III, 683.
- See also De Eds, F., Kuzell, W. C., and Winkle, W. van, jun.
- Cuttle, T. D. See Duncan, G. G.
- Cutuly, E., and Cutuly, E. C., spermatogenesis in rats, III, 648.
- Cutuly, E. C. See Cutuly, E.
- Cuvellier, B. V. J., rate of flow from a burette, I, 176.
- Cuvellier, E. See Maisin, J.
- Cuyler, W. K., Ashley, C., and Hamblen, E. C., urinary excretion of pregnenediol complex by males. III. Following intramuscular administration of deoxycorticosterone acetate, III, 850.
- See also Hamblen, E. C.
- Czarski, T. J. See Lovell, H. W.
- Czarski, Y. See Forbes, W. F.
- Czerschowska, R. See Mouriquand, G.
- Czimmer, A. G. See Sokoray, L.
- D.
- Dacey, J., McIntosh, R., and Maass, O., pressure-volume-temperature relations of ethylene in the critical region. I., I, 314.
- Dacie, J. V., effect of iron deficiency on fragility of rat erythrocytes, III, 627.
- Dack, G. M., Kirsner, J. B., Dragstedt, L. R., and Johnson, R., *Bacterium necrophorum* in chronic ulcerative colitis and effect of sulphanilamide in treatment, III, 60.
- Dack, S. See Master, A. M.
- Dadswell, H. E., and Ellis, D. J., [plant] cell wall. I. Demonstrating lignin distribution in wood, III, 549.
- Daels, J., action of F. 933 on uterus in relation to sexual cycle, III, 307.
- Dänzer, H., theory of paramagnetic relaxation, I, 103.
- Daffnee, R. W., treatment of gonococcal vulvovaginitis in children, III, 678.
- Daft, F. S., and Sebrell, W. H., hemorrhagic adrenal necrosis in rats on deficient diets, III, 410.
- Sebrell, W. H., Babcock, S. H., jun., and Jukes, T. H., effect of synthetic pantothenic acid on adrenal hemorrhage, atrophy, and necrosis in rats, III, 915.
- Daggs, R. G. See Pierce, H. B.
- Dagys, J., [yeast]-growth factors of birch sap, III, 537.
- See also Nielsen, N.
- Dahl, O., apparatus for electrodialysis and separation of organic colloids into sols and gels, I, 83. Inhibition of phosphorylation degradation of starch and glycogen in muscle extract, III, 535.
- Dahlke, W., intensity and cross-sectional distribution of the long-wave infra-red radiation (300 μ) from the high-pressure mercury arc, I, 50. Spectral energy distribution of long-wave infra-red (300 μ) radiation from various high-pressure discharges, I, 194. Interpretation of long-wave infra-red emission (300 μ) of mercury high-pressure arc as temperature radiation, I, 281.
- Dahn, H. See Erlenmeyer, H.
- Dahr, P., dried blood reaction in syphilis, III, 359. Blood groups, III, 627. Inheritance of blood factor P, III, 838. Differentiation of blood groups A₁ and A₂ by α_2 -(anti-O)-agglutinin in dog sera, III, 877.
- Dakin, T. W., and Ewing, D. T., thermodynamics of the silver bromide-mercurous bromide cell, I, 441.
- Dalai, G. A., Bokil, K. V., and Nargund, K. S., condensation of succinic anhydride with methyl ethers of orcinol and pyrogallol, II, 132. Condensation of *p*-anisylsuccinic anhydride with anisole and tolyl methyl ethers, II, 132.
- Dalby, G. See Hoffman, C.
- Dale, C. L. See Tsao, Y. F.
- Dale, H. H., physiology of nervous system, III, 197.
- Dale, W. M., effect of X-rays on carboxypeptidase, III, 766.
- Dalla Porta, N., electric susceptibility in a magnetic field, I, 381.
- Dalla Valle, J. M., significance of dust counts, III, 159. Chronic manganese poisoning in an ore-crushing mill, III, 930.
- and Goldman, P. H., volume-shape factor of particular matter, I, 43.
- and Hollaender, A., ventilating systems in transmission of bacteria, III, 824.
- Dalldorf, G., therapeutic use of vitamin-C, III, 819.
- Dalma, G., *Erythrophleum* alkaloids. I. Cassaine, alkaloid from *Erythrophleum guineense* (G. Don), II, 28.
- See also Ruzicka, L.
- Dalton, A. J., and Masson, G., effects of adrenalectomy on blood count of rat, III, 643.
- and Selye, H., blood picture during alarm reaction, III, 5.
- Dalton, H. R., and Nelson, J. M., tyrosinase from the wild mushroom, *Lactarius piperatus*, III, 71.
- Daltroff, L. See Gault, H.
- Daly, C. See Dill, D. B.
- Daly, E. F. See Bailey, C. R.
- Daly, S., Heller, G., and Schneider, E., effect of chlorophyll derivatives and related compounds on growth of *M. tuberculosis*, III, 266.
- Dam, H., and Glavind, J., application of tissue extract method for standardisation of heparin, III, 11. Alimentary exudative diathesis, a consequence of E-avitaminosis, III, 54. Action of vitamin-K in dietary and mechanically produced K-avitaminosis in fowls, III, 595. Vitamin-E and permeability of capillaries, III, 752.
- Glavind, J., and Karrer, P., biological activity of natural K-vitamins and related compounds, III, 431.
- Hansen, E. T., and Plum, P., vitamin-K lack in infants, III, 93.
- and Venndt, H., coagulation of blood plasma in hæmophilia, III, 283.
- Damboviceanu, A., and Barber, C., chemical properties of the complete antigen from cholera vibrio, III, 542.
- D'Ambrosio, L. See Morelli, A.
- Damerow, A. P. See Corper, H. J.
- Dameshek, W., and Henstell, H. H., diagnosis of polycythæmia, III, 627.
- and Myerson, P. G., "pigeon dermatitis"; a vitamin-B deficiency state with anæmia, III, 514.
- and Schwartz, S. O., acute hæmolytic anæmia (acquired hæmolytic icterus, acute type), III, 788.

- Dameshek, IV. See also Myerson, A.
- Damiani, N., nerve plexus of Abraham in palatine tonsil, III, 715.
- Damianovich, H. See Audubert, R.
- Damiens, A., dissociation of ammonium sulphide, I, 229.
- See also Jorissen, W. P.
- Dammann, E. See Kanitz, H. R.
- Damodaran, M., and Ramachandran, B. V., amino-acids of casein phosphopeptide, II, 317.
- and Ramaswamy, R., succinic dehydrogenase in germinating seeds, III, 866.
- D'Amonr, F. E., potency of commercial hormone preparations, III, 401. Qualitative study of normal gonadotropin, III, 403.
- and D'Amour, M. C., biological potency of international standard chorionic gonadotropin, III, 662. Comparison of international gonadotropin standards, III, 737.
- D'Amour, M. C. See D'Amour, F. E.
- Danby, C. J., photolysis of acetaldehyde, I, 368.
- and Hinshelwood, C. N., sensitisation of the hydrogen-oxygen reaction by nitrous oxide, I, 261.
- Danby, M., assay of male hormones with chicken test, III, 647. Formation and destruction of male hormone by surviving organs, III, 848.
- Dancey, T. E. See Reed, G. E.
- Danciger, J. A., fulminating meningococemia with bilateral adrenal haemorrhage (Waterhouse-Friedrichsen syndrome), III, 643.
- Danckwerts, P. V. See Bell, R. P.
- Dancoff, S. M., spin-orbit coupling in ^6He , I, 400.
- and Morrison, P., relativistic spin-orbit coupling in nuclei, I, 309.
- Dandy, W. E., section of human hypophyseal stalk, III, 402.
- and Kunkel, P. A., central connections of vestibular pathways, III, 200.
- Dane, E., synthesis in the steroid series, II, 83.
- See also Wieland, H.
- Danforth, D. N., and Ivy, A. C., effect of calcium on uterine contractions and on uterine response to intravenously injected oxytocics, III, 126.
- Dangjan, M. T., reactions of ferric chloride with methyl alcohol and methyl acetate and benzoate. II, II, 148.
- Dangschat, G., and Fisher, H. O. L., constitution of conduritol and cyclohexanetetraols, II, 170.
- Daniel, L., variations in colour of pods and seeds of haricot beans, III, 81. Effect of salt concentration of "watering" fluid, III, 361.
- Danielli, J. F., capillary permeability and edema in perfused frog, III, 384. Diffusion of large molecules through cell membrane, III, 764.
- See also Askew, F. A., and Webb, D. A.
- Danielopulu, D., errors of technique and interpretation in study of normal and pathological vegetative nervous system, III, 715.
- and Marcou, J., peripheral parasympathosympathetic regulation; reciprocal activation and antagonism, III, 199.
- Daniels, F. See Magee, J. L., and Petering, H. G.
- Daniels, L. E. See Cole, W. C.
- Daniels, T. C., and Iwamoto, H., N^1N^4 -nicotinoyl derivatives of sulphanilamide, II, 233.
- Danielson, I. S., Chu, H. I., and Hastings, A. B., pK'_1 of carbonic acid in concentrated protein solutions and muscle, III, 69.
- Danilevski, L. P. See Naumov, S. N.
- Danilov, S. N., Dinkin, M. E., Orlova, N. I., and Rabinkov, A. A., glyceryl derivatives of cellulose, II, 156.
- Danilova, V. V., fluorine in the waters of the Chibina region, I, 303.
- Danish, A. A. See Wheland, G. W.
- Daniushevskaja, R. J. See Naumov, S. N.
- Dankert, L. J. See Adams, R.
- Dankov, P. D., mechanism of formation and development of the latent photographic image, I, 124. Theory of origin and growth of metallic crystals from salt solutions, I, 199.
- and Schischakov, N. A., surface structure of passive iron, I, 160.
- See also Berditschevskaja, D. L.
- Dankova, T. P. See Berkenheim, A. M.
- Dann, F. P., quantitative biological assay of vitamin-K and its application to several quinone compounds, III, 284.
- Dannenber, A. M., Widerman, A. H., and Friedman, P. S., ascorbic acid in lead poisoning, III, 760.
- Dannheimer, W., "subformicale organ" (intercolumnar tubercle) of human third ventricle, III, 463.
- Danopoulos, E., blood-alcohol concentration in fever, III, 287. Alcoholamia in dogs before and after (I) production of Eck's fistula, (II) extirpation of the spleen, III, 287. Action of caffeine on metabolism, III, 440.
- Dansi, A. See Morelli, E.
- Danson, J. G., injuries to brain and their sequelae, III, 572.
- Dantchakoff, V., relation between free-martinism and hormonal intersexuality, III, 216. Effect of simultaneous administration of cortin and testosterone, III, 305. Chemical determinants of sexual maturation, III, 649.
- Daoud, K. M., sugar in the milk, and carbohydrate metabolism, of lactating diabetic women, III, 239.
- Dapples, E. C., coal metamorphism in the anthracite-crested Butte quadrangles, Colorado, I, 304. Distribution of heavy accessory minerals in a laccolith, I, 333.
- Darby, H. H., continuous source for Spekker photometer, I, 374.
- Darby, W. J., and Day, P. L., xylose as a cataractogenic agent, III, 115. Blood-sugar in rats receiving cataractogenic sugars, III, 591.
- Dargeon, H. W., malignant tumours in childhood, III, 46.
- Darken, L. S. See Saxton, B.
- Darlin, R. C., Courmand, A., and Richards, D. W., *jun.*, intrapulmonary mixture of gases. I. Nitrogen elimination from blood and body tissues during high oxygen breathing. II. Analysis of re-breathing method (closed circuit) for measuring residual air. III. Open-circuit method for measuring residual air, III, 712.
- Darling, B. T., and Dennison, D. M., water vapour molecule, I, 146.
- Darling, R. B. See Buehler, C. A.
- Darling, R. C. See Hall, M. G.
- Darling, S. See Veibel, S.
- Darlington, C. D., genetical and mechanical properties of sex chromosomes. V. *Cimex* and *Heteroptera*, III, 179. Prime variables of meiosis, III, 700.
- Darmois, M. E. See Murgier, M.
- Darnaud, C. See Baisset, A.
- Darnell, C. A. See Kiehle, F. A.
- Darnell, M. C., *jun.*, and Walker, B. S., determination of sodium in biological fluids, III, 696.
- Daro, A. F., Heskett, B. F., and Schiller, H. A., adrenaline in acute puerperal inversion of uterus, III, 409.
- Darrow, C. W., and Gellhorn, E., effects of adrenaline on reflex excitability of autonomic nervous system, III, 298.
- See also Gellhorn, E.
- Darrow, D. C., treatment of dehydration, acidosis, and alkalosis, III, 380.
- Harrison, H. E., and Taffel, M., tissue electrolytes in adrenal insufficiency, III, 124.
- See also Millar, H. C., and Yannet, H.
- Darrow, K. K., nuclear fission, I, 337.
- Darrow, M. A., simple staining method, III, 556.
- Dart, F. E., and Guth, E., thermoclastics and structure of rubber, I, 358.
- Dart, R. A., status of *Australopithecus*, III, 625.
- Darwin, C. G., evaluation of e , h , m , I , 242. Thermodynamics and the lowest temperatures, I, 361.
- Darwins, E., effect of carotenoids on growth and acid-fastness of the paratubercle bacillus of timothy grass, III, 75.
- Das, B. K. See Chatterjee, N. N.
- Das, K. L., geology of Tripura State, Bengal, I, 379.
- See also Biswas, H. G.
- Das, N. B., nucleotidase, III, 71.
- and Enler, H. *von*, reversibility of d -amino-acid deamination, III, 71.
- Das, S. R. See Ray, B. B.
- Das Gupta, C. R. See Napier, L. E.
- Das Gupta, D. See Guha, P. C.
- Das Gupta, H. K. See Dube, G. P.
- Das-Gupta, S. J., acridine derivatives. V. Aurothiol- and argentothiol-acridines, II, 263.
- Dass, I. N. D., and Dutt, S., colour in relation to chemical constitution of the organic and inorganic salts of oximino-malonylguanidine, II, 358.
- Dastuge, G., and Bresson, A., effect of morphine and its derivatives, notably dihydro-oxycodone, on action of acetylcholine, III, 679.
- See also Dodel, P.
- Dastur, N. N. See Smith, J. A. B.
- Datar, D. S., and Jatar, S. K. K., reactions of chromates at high temperatures. X. Decomposition of mixtures of calcium chromate with sodium carbonate and ferric oxide. XI. Structures of chromium chromates. XII. Magnetic properties of chromium chromates, I, 36, 102, 128.
- Datta, N. C. See Ramasarma, G. B.
- Datta, N. P., electrochemical properties of stearic acid. II, I, 112.
- See also Mukherjee, S.
- Datzko, V. G., organic matter in water of certain seas, I, 43.
- Dauben, H. J., *jun.* See Bartlett, P. D.
- Daubert, B. F., preparation of fatty acid β -monoglycerides, II, 297.
- and King, C. G., preparation of $\alpha\beta$ -diglycerides of fatty acids, II, 64.
- Daudin, J. See Auger, P.
- D'Aunoy, R., Pearson, B., and Halpert, B., carcinoma of lung, III, 229.

- Dautrebande, L., and Charlier, R., effect of amyl nitrite and caffeine on fibrillation produced by adrenaline-chloroform or -benzene mixtures, III, 564.
- Danvergne, M. See Mouriquand, G.
- Davenport, C. B., developmental curve of head height/head length ratio and its inheritance, III, 700.
- Davenport, H. A. See Bank, E. W., Chor, H., and Holmes, F. W.
- Davenport, H. W., gastric carbonic anhydrase, III, 132.
- David, E., significance of anomalies of optical constants of thin metallic layers, I, 200. Theory of optical ultrasonic absorption measurements, I, 235.
- David, J. C., and Krishnaswami, R., use of dogs for standardisation of digitalis, III, 153.
- Krishnaswami, R., and Srinivasan, M., inhibition of adrenaline oxidation, III, 896.
- David, K. G., identification of oestradiol in pregnancy urine, III, 654.
- David, L. See Puryesz, B.
- David, Robert. See Régner, J.
- David, Roger. See Grigoraki, L.
- David, W. T., and Pugh, B., latent energy and dissociation in flame gases, I, 363.
- Davidoff, L. M., psychic seizures as focal manifestations in post-traumatic brain disease, III, 112.
- See also Dyke, C. G.
- Davids, A. M., and Bender, M. B., effects of adrenaline on tubal contractions of rabbit in relation to sex hormones, III, 806.
- See also Rubin, I. C.
- Davidson, A. See Ratish, H. D.
- Davidson, (Miss) A. M. M., and Reade, T. H., action of nitrous acid on dimethyl-aniline-p-sulphonic acid in sulphuric acid, II, 11.
- Davidson, D., qualitative test for oxygen in organic compounds, II, 145. Hydroxamic acids in qualitative organic analysis, II, 240.
- Davidson, J. N., and Garry, R. C., monosaccharides absorbed from distal small intestine of anaesthetised cats, III, 415.
- See also Andrew, B. L.
- Davidson, J. R., attempt to inhibit development of rat carcino in mice, III, 316.
- Davidson, S., infantilism in ulcerative colitis, III, 310.
- and Sutherland, J. D., epanutin in epilepsy, III, 251.
- Davidson, V. E. See Nolan, T. J.
- Davidson, W. L., jun., protons from calcium, vanadium, copper, manganese, and scandium under deuterium bombardment, I, 52. Energy levels, mass, and radioactivity of ^{44}A , I, 141.
- See also Pollard, E.
- Davie, T. B. See Edwards, F. R., and Grace, W. H.
- Davies, A. A., control of haemorrhage by intravenous use of oxalic acid, III, 706.
- Davies, C. W., ionic equilibria in hydrogen salts of dibasic acids, I, 73.
- See also Philpot, (Miss) J. P., and Topp, N. E.
- Davies, D., and Klainer, M. J. I. Incidence of coronary atherosclerosis in essential hypertension. II. Role of hypertension in development of coronary atherosclerosis. III. Factors in production of angina pectoris, III, 633.
- Davies, D. R., and Hughes, T. P. E., faulty detoxication in mental disorder, III, 519.
- Davies, G., and Evans, D. P., influence of alkyl groups on reaction velocities in solution. IV. Alkaline and acid hydrolyses of ethyl esters of lower saturated aliphatic acids in aqueous acetone, I, 222.
- Davies, M. M., infra-red absorption of phenolic compounds, I, 56. Infra-red study of chloral hydrate and related compounds, I, 145. Infra-red absorptions of organic hydroxyl compounds in the solid state in the 3μ region, I, 402. Infra-red absorptions of polyhydroxylic compounds, I, 429.
- Davies, T. H., preparation of ferric mesoporphyrin chloride, II, 194. Metalloporphyrins. III. Co-ordination of nitrogenous bases with iron meso-, proto-, and haemato-porphyrins, II, 383.
- See also Clark, W. M.
- Davies, W. C., scheme for qualitative analysis employing spot tests, I, 370.
- See also Baker, J. W.
- Davis, A., diagnostic value of hystero-graphy, III, 661.
- Davis, A. R. See Winnick, T.
- Davis, B. L. See Phillips, Maz.
- Davis, C. D., effect of ablation of neocortex on mating, maternal behaviour, and production of pseudo-pregnancy in female rat and on copulatory activity in male, III, 485.
- Davis, C. L., and Fitz-Hugh, T., jun., achlorhydria in leukemias, III, 218.
- See also Harne, O. G.
- Davis, C. M., results of self-selection of diets by young children, III, 230.
- Davis, D. See Blumgart, H. L.
- Davis, D. B., and King, J. C., cervical rib in early life, III, 85.
- See also Kilduffe, R. A.
- Davis, D. S., b.p.-mol. wt. chart for higher hydrocarbons, I, 388.
- See also Bogart, H. N.
- Davis, D. W. See Rochow, T. G.
- Davis, E. F. See Kahler, H.
- Davis, F. J. See Winans, J. G.
- Davis, H., clarification of phases of physiology of hearing, III, 893.
- Davis, P. A., Loomis, A. L., Harvey, E. N., and Hobart, G., electrical reactions of human brain to auditory stimulation during sleep, III, 118.
- See also Davis, P. A.
- Davis, Harold, quantitative bacteriological investigation of tyndallisation process, III, 611. Effect on bacteria of substances in use for preparation of solutions for parenteral administration, III, 612.
- Davis, H. A., acute circulatory failure (shock) following subcutaneous injection of hypertonic sodium chloride solution, III, 559. Relative significance of water and of protein loss in dehydration shock, III, 561. Thyrotoxicosis with malignant neoplasms of thyroid gland, III, 726.
- Davis, H. P. See Reece, R. P.
- Davis, J. E., depression of experimental polycythamias by choline hydrochloride or liver administration, III, 281. Effect of ascorbic acid administration on experimental polycythamias: mechanism of cobalt polycythemia, III, 789.
- Davis, J. G., and Thiel, C. C., effect of p_{H} on growth and gas production by streptococci and lactobacilli, III, 356.
- Davis, J. H. See Faber, H. K.
- Davis, J. W. See Emerson, W. S.
- Davis, P. A., effects of acoustic stimuli on waking human brain, III, 118. Toxicity of benzene, III, 443. Evaluation of electro-encephalograms of schizophrenic patients, III, 486.
- and Davis, H., electro-encephalograms of psychotic patients, III, 22.
- See also Davis, H.
- Davis, R. E. See Butz, L. W.
- Davis, T. L., and Green, W. P., jun., aldehyde complexes of copper salts, II, 267. Reaction of formic acid [with aniline], II, 275.
- and Logan, A. V., metal pyridine complex salts. VI. Cobaltous and nickelous dipyrindine salts of fatty acids, II, 287.
- and Richmond, J. L., deepening of colour of sodium nitrophenoxide solutions with elevation of temperature, II, 215.
- Davis, T. W., and Burton, M., potential energy relationships in normal and excited acetaldehyde, I, 60.
- Ricci, J. E., and Sauter, C. G., solubilities of salts in dioxan-water solvents, I, 107.
- See also Burton, M., and Ricci, J. E.
- Davis, W. T., and Sheppard, E., gyrate atrophy of retina and choroid following retinitis pigmentation, III, 803.
- Davis, W. W. See Clowes, G. H. A.
- Davison, C., and Wechsler, I. S., erythroblastic (Cooley's) anaemia and neurologic complications (status dysmyelinatus), III, 627.
- Davison, R., Wooley, M., and Donovan, E., relationship between plasma-proteins and erythrocyte sedimentation rates in chronic atrophic arthritis, III, 629.
- Davison, R. A., and Curtis, G. M., acetone fractionation of blood- and urinary iodine, III, 58.
- Davissou, J. W. See Hippel, A. von.
- Davoud, J. G., and Hinshelwood, C. N., thermal decomposition of acetone, I, 77. Kinetics of thermal decomposition of fully deuterated diethyl ether, I, 165.
- Davson, H., effect of lyotropic anions on cation permeability, III, 684. Comparative effects of environmental changes on permeability of cat erythrocyte membrane to sodium and potassium, III, 702.
- and Ponder, E., photodynamically induced cation permeability and its relation to haemolysis, III, 379.
- and Quilliam, J. P., permeability of blood-aqueous humour barrier, III, 638.
- See also Duke-Elder, S.
- Davtjan, O. K. See Pantschenkov, G. M.
- Dawkins, C. J. M., convulsions with vinesthene anaesthesia, III, 525. Effect of variations in atmospheric conditions on nitrous oxide and vinesthene anaesthesia, III, 680.
- Dawson, A. B., differential staining of anterior pituitary of cat, III, 120.
- and Friedgood, H. B., time and sequence of preovulatory changes in cat ovary after mating or mechanical stimulation of cervix uteri, III, 738.
- See also Friedgood, H. B.
- Dawson, J. W., and Dehn, W. M., simple hot filtrations and crystallisations, I, 378.

- Dawson, M. H., and Hobby, G. L., chemotherapy of experimental hæmolytic streptococcal infections with gold salts, III, 862.
- See also Hench, P. S., and Meyer, Karl.
- Dawson, R. F., and Robson, J. M., technique for perfusion of foetal placental circulation, III, 738.
- Dawson, W. T., relations between age and weight and dosage of drugs, III, 683.
- Dax, E. C., pathogenesis of retinitis pigmentosa, III, 844.
- Day, A. R. See Immediata, T., and Rubin, N.
- Day, O. D. M., chronic endemic fluorosis [of teeth] in Northern India, III, 761.
- Day, F. E. H., gastro-intestinal diseases among steel workers, III, 257.
- Day, F. T., reproduction in mare, III, 579.
- Day, G., sedimentin index, III, 789.
- Day, H. G. See Shils, M.
- Day, J. D. See Dible, J. H.
- Day, J. J., and Komarov, S. A., glucose and gastric secretion, III, 218.
- Day, M. F., neurosecretory cells in ganglia of Lepidoptera, III, 625.
- Day, P. L. See Darby, W. J.
- Day, R., effect of sleep on insensible perspiration in infants and children, III, 158.
- Smith, J. R., and Klingman, W. O., tests of function of vegetative nervous system in acrodynia, III, 199.
- Day, R. A., jun., and Pease, R. N., effect of surface on cool flames in the oxidation of propane, I, 414.
- Day, T. D., and Armstrong, T. G., fibrosis of liver in heart failure, III, 502.
- De, R., weak radioactive substance, I, 241.
- De, S. S., hæmolysin of cobra venom. I. Isolation of hæmolysin from cobra (*Naja naja*) venom, III, 527. Effect of different substances on activity of cobra (*Naja naja*) hæmolysin, III, 788. Reversible inactivation of hæmolysin of cobra (*Naja naja*) venom, III, 788.
- Deacon, G. E. R., carbon dioxide in Arctic and Antarctic seas, I, 237.
- De Allende, J. L. C., effect of prolactin on oviduct of batrachians, III, 28. Effect of œstrone on oviduct of the toad *Bufo arenarum*, III, 31. Assay of blood-progesterone during sexual cycle of *Macaca rhesus*, III, 850.
- De Almeida, M. O., epileptiform fits produced by sudden cooling of spinal cord in frog, III, 569.
- Dealy, F. N. See Oard, H. C.
- Deamer, W. C., allergic diseases in childhood, III, 605.
- See also Gordon, H. H.
- Dean, A. L., cancers of genito-urinary organs in children, III, 46.
- Dean, E. D. M. See Ham, A. J.
- Dean, E. W., Ruh, E. L., and Walker, R. W., Saybolt one fifteen viscosimeter, I, 446.
- Dean, H. L., Delafield's hæmotoxylin and safranin for staining plant materials, III, 556.
- Dean, L. A. See Fukunaga, E. T.
- Dean, R. B., adsorption potentials. II. Oil-water potentials, I, 109. Anaerobic loss of potassium from frog muscle, III, 567.
- Curtis, H. J., and Cole, K. S., impedance of bimolecular films, I, 210.
- and Gatty, O., adsorption potentials. III. Air-water potentials, I, 109.
- Dean, R. B., Gatty, O., and Rideal, E. K., adsorption potentials. I. General theory, I, 109.
- Deanesley, R., uterus masculinus of rabbit and its reactions to androgens and œstrogens, III, 582. Modification of effectiveness of gonadotropic extracts, III, 642.
- De Arellano, M. R. See under Ramirez de Arellano.
- Deatherage, F. E., and Mattill, H. A., antioxidants and the autoxidation of fats. VIII. Autoxidation of oleic acid, methyl oleate, oleyl alcohol, and *cis*- Δ^8 -octadecene, II, 4.
- Deb, S., physical properties of mineralogical constituents of vredenburtite from India, I, 47. Origin of the D layer, I, 425.
- De Bakey, M., Burch, G. E., and Ochsner, A., effect of chemical irritation of a venous segment on peripheral pulse volume, III, 17.
- See also Burch, G. E., and Ochsner, A.
- De Balogh, E., new heterologous tumour, "Budapest 1938," successfully propagated in Hungarian white rats, III, 670.
- De Barbieri, A., effect of duodenal anti-diabetogenic factor on anti-insulin action of glycotrophic principle of anterior pituitary gland, III, 405.
- and Puzzuoli, D., effect of insulin and duodenal anti-diabetogenic factor on experimental ketosis, III, 405.
- De Barenne, J. G. D., and McCulloch, W. S., sensory cortex of chimpanzee, III, 112.
- Debauche, H. R., silver impregnation method for nerve cells and fibres, III, 89.
- De Beer, E. J. See Hjort, A. M., and Light, A. E.
- De Beer, G. R., embryos and ancestors, III, 696.
- and Grüneberg, H., pituitary dwarfism in mouse, III, 279.
- De Benneville, P. L., and Connor, R., hydrogenation of coumarin and related compounds, II, 186.
- Deberque, S. See Berthelot, A.
- De Boer, J. H., and Bruining, H., secondary electron emission. VI. Influence of externally adsorbed ions and atoms on secondary electron emission of metals, I, 1.
- and Fast, J. D., electrolysis of solid solutions of oxygen in metallic zirconium, I, 165.
- De Booy, J., Bredée, H. L., and Hermans, P. H., mechanism of deformation of hydrocellulose. VI (2). Viscosity determinations on stretched and unstretched filaments, I, 113.
- See also Bredée, H. L.
- Debot, A. See Dubuisson, M.
- De Bray, M. E. J. G., measurements of velocity of light, I, 55.
- Debre, R., familial hepatitis and chronic jaundice, III, 311.
- Lamy, M., See, G., and Schrameck, G., congenital and familial hæmolytic disease in children, III, 7.
- De Brouckère, (Mlle.) L., equivalent adsorption of anions and cations, I, 22.
- De Bruijn, J. A., jun., [laboratory apparatus], I, 274.
- De Bruin, T. L. See Humphreys, C. J.
- De Bulet, H. M., and Ströer, W. F. H., study of brains of developing amphibia after removal of embryonic sense organs, III, 640.
- Debye, P., Fourier analysis of electron diffraction photographs, I, 101. Theory of the separation method of Clusius, I, 135.
- De Cairo, G. See Marenzi, A. D.
- De Camp, A. L., blood-sugar changes in labour and after delivery, III, 12.
- De Caro, L., and Butturini, L., fluorimetric determination of vitamin-B₁ in tissues. III. Pyrophosphoric ester (cocarboxylase). IV. Normal and B₁-avitaminotic animals, III, 857.
- Déchène, G., photo-electric modifications of mercuric oxide in contact with an electrode, I, 375.
- Decherd, G. M. See Calvin, D. B., Hall, W. K., and Herrmann, G.
- De Cholnoky, T., supernumerary breast, III, 834.
- Decker, C. T., influence of temperature on sedimentation rate of erythrocytes, III, 629.
- Decker, D. A., Canizares, O., and Reider, R. F., mouse brain antigen, III, 79.
- Decker, M. T. See Ehrenstein, M.
- Décombe, J., and Rabinowitch, J., catalytic hydrogenation of 5:6-dibromides of sterols, II, 83.
- De Decker, J. F. See Menzel, W.
- Dederding, D. See Mygind, S. H.
- De Degiorgi, A. C., and Zappi, E. V., new aromatic fluoro-derivatives. III., II, 341.
- Dedek, J., Jelinek, B., and Kulcický, I., influence of starch cations on properties of the starch, I, 410.
- De Diesbach, H., Jacobi, O., and Taddei, C., benzoyl derivatives of indigotin. V., II, 235.
- Dedimos, sudden blindness in children, III, 491.
- Dedusenko, L. S. See Naumov, S. N.
- De Duve, C. See De Nayer, P. P.
- Dee, D. D. See Poo, L. J.
- Dee, P. I. See Curran, S. C.
- De Eds, F., Wilson, R. H., and Cutting, W. C., thyrotropic hormone and fluorine activity, III, 731.
- See also McNaught, J. B., and Wilson, R. H.
- Deen, K. J. van, and De Haan, J., effects of acid dyes on explanted chick mesonephros, III, 625.
- Dees, S. C., clinical study of Weltmann serum coagulation reaction, III, 881.
- Defendorf, J. H., pulmonary and urinary excretion of paraldehyde in dogs, III, 251.
- De Fazi, R., and Pirrone, F., constitution of cholesterol. XVII. Isomerisation of cholesterol by hydrochloric acid, II, 128.
- Defner, M., and Franke, W., degradation of citric acid by bacteria, III, 167.
- See also Franke, W.
- De Fonbrune, P. See Commandon, J.
- De Forest, E. M. See Adams, A. E.
- De Frates, J. See Leonard, S. L.
- De Fremery, P., and Geerling, M. C., sensitisation of uterus of infantile rabbits to progesterone with anol benzoate and diethylstilbæstrol, III, 130.
- See also Wilkinson, J. F.
- Defretin, R., presence of phenol-oxidases in mucus glands of *Nereis irrorata* and *N. pelagica*, III, 260.
- De Gaetani, G., chemical nature of spheroidal bodies in Gamna's area (spleno-granulomatosis siderotica), III, 837.
- Degan, C. See Gradinesco, A.

- De Gara, P. F., influence of centrifugation on agglutination of pneumococci, III, 264.
See also Bukantz, S. C.
- De Garis, C. F. See Chase, R. E.
- Degenhard, W. See Leschewski, K.
- Degering, E. F., and Ball, T. Z., micro-determination of carbon by the wet method, II, 145.
See also Binkley, W. W., Burton, T. M., and Johnson, K.
- Degnan, W. M., and Pope, F. B., *N*-aryl-*N*-alkylfuramides, II, 353.
See also Hill, A. J.
- De Gowin, E. L., and Hardin, R. C., reactions from transfusion of preserved blood, III, 878.
- Hardin, R. C., and Harris, J. E., preserved blood; effect of high plasma-potassium, III, 558.
- Hardin, R. C., and Swanson, L. W., preserved blood; transfusion of cold blood, III, 558.
- Harris, J. E., and Plass, E. D., preserved blood, III, 558.
See also Warner, E. D.
- De Groat, A. F., symmetric necrosis of globus pallidus in barbiturate poisoning, III, 441.
- De Groat, A. F. See Boyle, R. W.
- De Groot, W., and Niessen, K. F., "albedo" of a hydrogenated substance for slow-moving neutrons, I, 186.
- De Haan, J. See Deen, K. J. van.
- De Haas, J. H. See Posthuma, J. H.
- De Haas, W. J., and Berg, G. J. van den, electrical conductivity of pure metals, I, 434.
and Blom, J. W., increase of electrical resistance in a magnetic field; diamagnetism, I, 434.
- Guinau, O. A., and Casimir-Jonker, J. M., superconductivity, I, 434.
and Handel, J. van den, paramagnetism, I, 388.
- Schultz, B. H., and Koolhaas, (Miss) J., magnetic properties of salts of the iron group at low temperatures, I, 103.
- and Wiersma, E. C., adiabatic demagnetisation of paramagnetic salts, I, 388.
See also Becquerel, J., and Casimir, H. B. G.
- De Haas-Lorentz, G. L., osmotic pressure, redox potential, affinity, I, 27.
- De Hemptinne, M. See Rajam, J. B.
- Dehn, W. M. See Dawson, J. W.
- Deichmann, W., and Scott, E. W., determination of phenol and related compounds in tissues, III, 370.
- Deighton, T., and Hutchinson, J. C. D., metabolism of fowls. II. Effect of activity on metabolism. III. Comparative nett energy of Sussex ground oats and white maize meal for fattening cockerels, III, 325, 748.
- Deinse, F. van, late development of "tuberculin" in a culture of acid-resistant saprophytes, III, 266. Xanthoproteic reaction and presence of tuberculin in cultures of avian *B. tuberculosis* on Sauton's medium, III, 613.
and Fethke, N., effect of substances modifying surface tension on microbial cultures on synthetic liquid media, III, 269.
- Deiss, E., Runge patterns and Liesegang rings on filter-paper, I, 72.
- De Jager, E. F. J., cranial anatomy of genus *Dermophis*, III, 371. Gymnophone quadrate and its processes, III, 371.
- Déjardin, G. See Arnulf, A., and Chalonge, D.
- Dejean, C. H., and Ferrié, J., ætiology of visual hallucinosis, III, 117.
- De Jong, A. W. K., complete conversion of *l*-ecgonine methyl ester into *l*-cocaine, II, 111.
- De Jong, L. E. den D., behaviour of *Azobacter chroococcum* under abnormal growth conditions, III, 166.
- De Jong, S. See Beatty, R. A.
- De Jong, W. F., and Bouman, J., reciprocal lattice of crystals, I, 100.
- De Jongh, S. E., Querido, A., and Stolte, L. A. M., paradoxical effects of œstrone in male animals, III, 32.
and Woerd, L. A. van der, inhibition of lactation by gonadotropic hormone, III, 128. Influence of age on paradoxical actions of œstrone, III, 130.
See also Kok, D. J.
- Dekay, H. G. See Rihn, A. E., and Vaughan, J. B.
- Dekeyser, J. See Delrue, G.
- Dekeyser, W., and Prins, J. A., crystallisation by pulverisation, I, 14.
- Dekker, A. O., and Dickinson, R. G., oxidation of ascorbic acid by oxygen with cupric ion as catalyst, I, 416.
- Dekking, (Miss) A. C. B. See Jorissen, W. P.
- De Labriola, E. R. See under Restelli de Labriola, E.
- De Lachaud, R. See Lacoste, A.
- De Laet, M., and Wiser, M., toxicology of electric welding, III, 68.
- Delafield, M. E., and Smith, H. A., influence of pancreas and pancreatic preparations used for extraction of fractions from *Bact. aertrycke* on oxygen uptake of brain and muscle suspensions, III, 147.
- De la Fuente, C. L., chemistry of root secretions, III, 270.
- Delahant, A. B. See Vorwald, A. J.
- De Lamater, A. See Turner, K. B.
- De Landsberg, V., calculation of vapour pressures of binary liquid mixtures, I, 249.
- De Langhe, J. See Deulofeu, V.
- De Langhe, J. E., latent image, I, 170.
- Delaunay, A. See Boivin, A.
- Delaune, R. See Govaerts, A.
- Delaunoy, A. L. See Handovsky, H.
- Del Baere, L. J., oxygen tension in the tissues, III, 195.
- Delbrück, M., statistical fluctuations in autocatalytic reactions, I, 167. Adsorption of bacteriophage under various physiological conditions of host, III, 689. Growth of bacteriophage and lysis of host, III, 689.
See also Pauling, L.
- Del Campo, A., Burriel, F., and Escobar, L. G., determination by photo-electric methods. II, I, 329.
- Del Castillo, E. B., and Di Paola, G., vaginal response to œstradiol and deoxycorticosterone, III, 580.
and Fanvety, J. C., international "chorionic gonadotropin" standard, III, 810.
and Pinto, A., seasonal variations in weight of testis and prostate of white rats, III, 583.
- Delcourt, R., effects of colchicine injection in amphibians, III, 180.
- Deleano, N. T., Ullmann, M. A. P., and Ullmann, L. V., effect of heteroauxin (β -indolylacetic acid) on catalase of wheat stems during growth, III, 617.
- Deleo, E. See Oliveri-Mandalà, E.
- Delépine, M., conversion into chlorides of metals of the platinum family by ammonium chloride vapours in presence of oxygen, I, 129.
and Jensen, K. A., formation of amino-aldimine complexes by hydrogenation of amino-nitriles in presence of nickel, II, 90.
- Delfs, E. See Shettles, L. B.
- Delga, J., action of Nessler's reagent on dichloroethyl sulphido (yperite) and β -chlorovinylchloroarsines (lewisite) in aqueous medium, II, 117. Colour reaction of phenarsazine chloride, II, 242.
- Delimarski, J. K., equilibrium between metallic and non-metallic phases in the molten state, I, 294.
and Berenblum, L. S., equilibrium $\text{Cd} + \text{PbBr}_2 \rightleftharpoons \text{CdBr}_2 + \text{Pb}$, in molten aluminium bromide-potassium bromide solution, I, 294.
- Della Corte, M. See Rieca, V.
- Dellepiane, G. B. See Cavalli, F.
- Delli Bovi, E. J., thyroid gland: clinical pathologic study with special reference to true tumour, III, 726.
- Deloffre, G., changes in property of imbibition of nuclear colloids following trauma, III, 70. Effect of low temperature on amyolysis and amylogenesis in lupin, III, 270.
- Delor, J. See Gley, P.
- Delory, G. E. See King, E. J.
- Del Regno, F., determination of nicotinic acid in urine, III, 52. Effect of nicotinic acid on phosphatase activity, III, 73.
See also Rossi, A.
- Delrieu, A. See Hermann, H.
- Delrue, G., determination of pyruvic acid [in tissue suspensions] by salicylaldehyde, III, 778.
and Dekeyser, J., effect of insulin on metabolism of pyruvic acid, III, 675.
See also Schockaert, J. A.
- Delsaso, L. A. See Barkas, W. H., and Creutz, E. C.
- Deltour, P., behaviour of Belgian frogs in relation to Trevan's dose-mortality curve in assay of digitalis, III, 601.
- Demange, G. See Servantie, L.
- DeMarsh, Q. B., Windle, W. F., and Alt, H. L., effect on early post-natal blood picture of depriving newborn of placental blood, III, 838.
- De Masters, C. U. See Abbott, O. D.
- De Mauny, H. C., preparation of aliphatic nitrohydrocarbons, II, 148.
- Demelonne-Jaminon, G. See Welsch, M.
- De Mello, J. F., diets deficient in vitamin-B and their influence on intestinal yeast flora of animals, III, 914.
and De Sá Viegas, J., dissociation of yeast cultures into *S* and *R* forms, III, 867.
- Demers, P. See Lortie, L.
- Demidenko, T. T., and Barinova, R. A., influence of air humidity on uptake of nutrient elements by spring wheat, III, 615. Influence of soil temperature on uptake of nutrient elements by spring wheat, III, 615. Uptake of nutrient elements by plants suffering water deficiency, III, 615.

- De Milt, C., Robert Hooke, chemist, I, 135.
and Sartor, M., preparation of 4:4'-dicyanodiphenyl and diphenyl diketones, II, 349.
- Deming, L. S. See Brunauer, S.
- Deming, W. E. See Brunauer, S., and Rossini, F. D.
- De Minjer, (Miss) C. H. See Reinders, W.
- Demole, M., and Neeser, J., azotemia after gastro-intestinal hemorrhages, III, 500.
- Demolon, A., and Dunez, A., nitrogenous nutrition of leguminous plants, III, 692.
- De Montmollin, R., and Streiff, E. B., comparison of arm and retinal arterial pressure and of intra-ocular pressure during insulin shock, III, 633.
- Demoor, J., humoral manifestations in heart, III, 291.
- De Moor, P., cardiac factor in post-operative crisis in hyperthyroidism, III, 303.
- Demorra, (Signa) A. See Tappi, G.
- Dempsey, E. W., relationship between central nervous system and reproductive cycle in female guinea-pig, III, 211. Maturation and cleavage figures in ovarian ova, III, 552.
- and Uotila, U. U., effect of pituitary stalk section on reproductive phenomena in female rat, III, 900.
- See also Rosenbluth, A., and Wislocki, G. B.
- Dempster, A. J. See Wilkins, T. R.
- Demuth, F., energy exchange, growth, and differentiation. II. Effect of oxygen on growth and development of chick embryos, III, 279.
- De Nayer, P. P., Oosveldt, M. van, De Duve, C., and Bouckaert, J. P., influence of insulin on disappearance of glucose, III, 412.
- Denbigh, K. G., experiments with atomic hydrogen: search for higher hydrides of nitrogen, phosphorus, and sulphur, I, 79. Polarizabilities of bonds. I, I, 403.
- Denecke, and Dockhorn, E., polycythemia, III, 376.
- Denenholz, E. J. See Rambar, A. C.
- Den Hartog Jager, W. A., endocrine function of pineal gland, III, 122.
- See also Geesink, A.
- Denigès, G., microchemical identification of brucine and strychnine with alkali iodide and chlorate; applications, II, 32. Colorimetric determination of hippuric acid, II, 200. Micro-crystallographical detection of uric acid, II, 386. Micro-chemistry of xanthine, II, 386.
- Denis, P., salts of rubradinine, II, 262.
- Denisenko, J. I., and Naber, A. D., dehydration of homologues of cyclopentanol. III, II, 368.
- Denk, W., heredity and carcinoma, III, 317.
- Dennig, H., and Veiel, K., diagnosis of Graves' disease, III, 303.
- Dennis, C., injury to ileal mucosa by contact with distilled water, III, 741.
- Buirge, R. E., Varco, R. L., and Wangenstein, O. H., aetiology of acute appendicitis, III, 664.
- and Visscher, M. B., influence of various factors on intestinal absorption involving osmotic work in unanesthetized dog, III, 741.
- See also Kabat, H., and McQuarrie, I.
- Dennis, E. W., toxicity of "Q" substance from *E. typhosa*, III, 266. Toxicity of acid-soluble typhoid toxin for laboratory animals, III, 357. Tissue response of rabbits to lipid components of typhoid bacilli, III, 828.
- Dennis, E. W., and Senekjian, H., leucocidal toxin extracted from typhoid bacilli, III, 171.
- Dennison, R. W. G., solanum virus 4, III, 358.
- Dennison, D. M., excited states of the ^{16}O nucleus, I, 191.
- See also Darling, B. T., Fuson, N., and Koehler, J. S.
- Dennison, R., growth response of plants to riboflavin and ascorbic acid, III, 777.
- Denny, F. E., respiration of gladiolus corms during prolonged dormancy, III, 364.
- Denny-Brown, D., selected writings of Sir Charles Sherrington, III, 275.
- De Nô, R. L., release of acetylcholine by sympathetic ganglia and synaptic transmission, III, 715.
- Dent, C. E. See Barrett, P. A.
- Deobald, H. J. See Hart, E. B.
- De Ome, K. B. See Taylor, L. W.
- Deonier, C. C., effects of toxic compounds on gustatory chemoreceptors in diptera, III, 401.
- De Oreo, G. A. See Cole, H. N.
- Deotto, R., effect of thionine and pyocyanine on development of fertilised eggs of *Paracetrotus lividus*, III, 34. Oxidative metabolism of acetoacetic acid by *B. coli commune* in phases S and R, III, 769.
- De Pina, L., anomalies of hand and morphology of papillary ridges, III, 277.
- De Piro, R. R. See Audubert, R.
- Depitre, (Mlle.) See Benda, R.
- De Potter, P., antigenic properties of typhoid lysates prepared with aqueous solutions of essential oils, III, 542.
- De Prangen, A. H., myopia problem, III, 204.
- Derby, I. M. See Wiener, A. S.
- Derek, J. H. See Braithwaite, J. V.
- De Renzi, S., and Michelazzi, A. M., cells of lymph glands, III, 88.
- Derenzini, T., atom factor of mercury, I, 427.
- De Ritis, F., and Stolfi, G., content of ascorbic acid in organs during experimental influenza virus infection, III, 430. Resistance of influenza virus to ultraviolet irradiation, III, 456.
- Derjaguin, B., repulsive forces between charged colloid particles and theory of slow coagulation and stability of lyophobic sols, I, 111.
- Kussakov, M., and Lebedeva, L., range of molecular action of surfaces and multimolecular solvate (adsorbed) layers, I, 23.
- Dermer, H., and Brown, N. A., cytological study of effect of colchicine on plant tumours, III, 503.
- Dermer, O. C., and Crews, L. T., composition of seeds of *Sapindus drummondii*, III, 83.
- and Dermer, V. H., solubilities of sodium and potassium salts of nitrophenols and related acids, I, 108.
- Dermer, V. H. See Dermer, O. C.
- De Robertis, E., hepatic cytology in phloridzin diabetes, III, 312.
- and Primavesi, L., cells of islets of Langerhans in *Bufo arenarum*, III, 578.
- De Rochemont, R. du M., depth dose and rotation therapy, III, 530.
- De Rôth, A., bilateral detachment of retina; (heredodegenerative disease), III, 398. Local action of oils containing vitamin-A, III, 891.
- Derom, E., and Grimson, K. S., vasomotor innervation of forelimb in dog, III, 193.
- De Rorthays, R. See Portier, P.
- De Rothschild, B., variation of material yield of *Aspergillus niger* as a function of the time, III, 351.
- Derra, E., and Korth, J., effect of carbon dioxide respiration on changes of blood gases in avertin anaesthesia, III, 925.
- D'Errieo, A., surgical treatment of hydrocephalus associated with spina bifida, III, 113.
- Derrien, Y. See Roche, J.
- Dersham, G. E. See Sholl, L. B.
- Dervichian, D. G., changes of phase and transformations of higher order in monolayers, I, 22, 69. Transformations in mono-layers, I, 292.
- De Sacy, G. S. See Arthus, A., and Lourau, M.
- Desai, B. N. See Barve, P. M.
- Desai, R. D., and Radha, K. S., action of hexamethylenetetramine on methyl esters of phenolcarboxylic acids. I. Synthesis of 2:4-dihydroxy-2-formylbenzoic acid, II, 309. Friedel-Crafts reaction. V. Action of acetic anhydride and benzoyl chloride on methyl β -resorcylate, II, 375.
- and Sahariya, G. S., methylation of ethyl methylcyclohexylidenecyanoacetates and reduction of ethyl 2-methylcyclohexylidenecyanoacetate, II, 130. Synthesis of α -dimethyltricarballic and α -1-carboxycyclopentylsuccinic and α -1-carboxy-3-methylcyclopentylsuccinic acids, II, 130.
- See also Akram, M., Bukhsh, W., and Chaudhry, N. A.
- Desaive, P., and Verlinden, C., bony metastases of epidermoidal epitheliomas, III, 425.
- De Santibañes, J. See Paternosto, P. G.
- De Santis, A., medullary canal of long bones during growth, III, 85.
- De Santo, D. A., and Colonna, P. C., embryology of hip joint, III, 622.
- De Sá Viegas, J. See De Mello, I. F.
- Desbaillets, J. See Briner, E.
- Descamps, R., polarimetric study of action of heat on crystalline *l*-malic acid, II, 203.
- Deschali, G. I., hydrogenation of benzaldehyde under pressure, II, 279.
- Deschner, W. W., and Brown, G. G., pressure-volume-temperature relation for propane, I, 314.
- Desclin, L., androgenic action of progesterone, III, 650.
- De Selincourt, M., b.p. of selenium, I, 289.
- Deshapande, S. S., Bhagwat, W. V., and Subnis, C. W., velocity of transformation of 1:3:5-triketones into 2:6-disubstituted γ -pyrones. I. Velocity of transformation of acetonedioxalic ester into chelidonic ester, I, 297.
- DeShazo, T. See Irons, J. V.
- Deslandres, H., application of the new analysis of molecular spectra to interesting molecules, I, 8. Application of the new analysis of molecular spectra to interesting molecules; simple relation between frequencies of the same molecule in gaseous and liquid states, I, 55. Common properties of molecules containing hydrogen, I, 195.

- Desnuelle, P., anaërobic decomposition of cysteine by *Bacterium coli*. II. Degradation of L-cystine. III. Optic specificity of cysteinase, III, 75, 688.
- Wooley, E., and Fromageot, C., anaërobic decomposition of cysteine and cystine by *Propionibacterium pentosaceum*, III, 539.
- De Soldati, L., circulatory modifications in dog in B₁-avitaminosis. I. Pulse, blood pressure, and electrocardiogram, III, 477. Pharmacological reactions of circulatory system in animals in avitaminosis-B₁, III, 566.
- See also Porto, J.
- De Somer, E., effect of asphyxia on the electrocardiogram, III, 189. Experimental heart block and "periods of Wenckebach." I. and II., III, 290.
- De Sousa, M., vital staining of human conjunctiva, III, 488.
- Despons, T., action of gold salts on laryngeal tuberculosis, III, 527.
- Desreux, V. See Herriott, R. M.
- Dessau, F. I. See Thomas, R. M.
- D'Este, G., deproteinisation of milk and blood and determination of chloride in trichloroacetate filtrates, III, 619.
- Destriau, G., action of magnetism on electrolyte solutions, I, 324.
- and Loudette, P., spectrophotometric researches in electrophotoluminescence, I, 196.
- De Sütö-Nagy, G., principle with progesterone-like activity obtained from a plant source, III, 737.
- De Takats, G., Beck, W. C., and Roth, E. A., treatment of peripheral vascular disease in neuro-circulatory clinic, III, 385.
- See also Scupham, G. W.
- Deth, J. H. M. G. van, induction and regeneration of lens in chick embryo, III, 638.
- De Traverse, P. M. See Rangier, M.
- Detre, L. See Bozicevich, J.
- Detrick, L. E., Dunn, M. S., McNamara, W. L., and Hubbard, M. E., effect of vitamin-P (citrin) on vitamin-C-deficient guinea-pig, III, 595.
- DeTurk, E. E. See Stubblefield, F. M.
- Detweiler, H. K., Kinsey, H. I., Brown, W. H., and Feasby, W. R., sulphapyridine in pneumonia, III, 757.
- See also Morgan, J. R. E.
- Detwiler, S. R., comparative studies on eyes of nocturnal lemroids, monkeys, and man, III, 202. Eye of *Nycticebus tardigrada*, III, 572. Comparative anatomical studies of eye with special reference to photoreceptors, III, 892.
- and Copenhaver, W. M., growth and pigmentary responses of eyeless *Amblystoma* embryos reared in light and in darkness, III, 574. Developmental behaviour of *Amblystoma* eggs subjected to atmospheres of low oxygen and high carbon dioxide, III, 835.
- Deuel, H. J. See Glass, S. J.
- Deuel, H. J., jun., Hallman, L. F., Greeley, P. O., Butts, J. S., and Halliday, N., ketosis. XVII. Rate of disappearance of β -hydroxybutyric acid in fasted and fed rats, III, 434.
- See also Blunden, H., and Halliday, N.
- Deulofeu, V., De Langhe, J., Labriola, R., and Carcamo, V., Argentine plants. II. Aspidospermine from *Vallesia glabra* and *V. dichotoma*, III, 832.
- Dnprat, E., and Labriola, R., acetyl content of marinobufagin, arenobufagin, and acetylmarinobufagin, II, 257.
- Deulofeu, V., Hug, E., and Mazzocco, P., Argentine plants. I. Hypophorine from *Erythrina cristagalli*, II, 59.
- See also Restelli de Labriola, E.
- Deutsch, E. See White, F. W.
- Deutschbein, O., experimental investigation of processes of light emission, I, 96.
- Deutschman, A. J., jun. See Emerson, W. S.
- Devadetta, S. C. See Acharya, B. N.
- Devaney, T. E. See Pietenpol, W. B.
- DeVault, D. C. See Ruben, S.
- Devaux, H., wettability of solid surfaces, I, 110.
- Devernoix, R. See Hubert, C.
- De Villiers, C. G. S., skull of South African skink, *Aconitis meleagris*, III, 371.
- De Villiers, J. E., iron-rich kornerupine from Port Shepstone, Natal, I, 333. Origin of the calcareous deposits of the Rietspuit Valley, Orange Free State, I, 396.
- Devine, J., *in vitro* synthesis of adrenaline under physiological conditions, III, 238.
- Devirian, P. S. See Addicott, F. T., and Bonner, J.
- Devjatov, J. B. See Arbuzov, E. A.
- Devlin, H. B. See Orten, J. M.
- Devons, S. See Burcham, W. E.
- Devonshire, A. F., critical and co-operative phenomena. V. Specific heats of solids and liquids, I, 153.
- De Vos, P. J. G., second maximum in the Rossi transition curve for copper, I, 188.
- De Vries, D. A. See Opechowski, W.
- De Vries, T. A. See Ketelaar, J. A. A.
- Devuyst, A. See Meurice, R.
- Devuyst, R. See Bessemaire, A.
- De Waele, H., and Vandeveld, J., reflex effects of compressing auricles, III, 190. Chemoreceptors in auricle, III, 190. Effect of compressed air and oxygen excess on hypertensor reflex of auricles, III, 564. Chemo-sensitivity of hypertensor reflex of auricles to toxic substances, III, 564. Auricular pressor reflex, III, 708.
- Dewar, D. J. See Steacie, E. W. R.
- De Weerd, W., hæmatological studies on sternal bone marrow biopsies, III, 281.
- De Wesselow, O. L. V. S., and Thomson, W. A. R., study of serum-electrolytes in hypertension, III, 287.
- De Wet, J. S., connexion between the spin and statistics of elementary particles, I, 280. Spinor equations for particles with arbitrary spin and rest mass zero, I, 385.
- Dewey, B. T., and Sperry, R. B., identification of organic acids by the use of *p*-chlorobenzyl- ψ -thiuronium chloride, II, 77.
- and Witt, N. F., identification of alcohols by means of optical properties of esters of carbanilic acid, II, 360.
- De Wildeman, E., mucilages: defensive and nutritive products of algæ, III, 695.
- De Winiwarter, H., origin and development of carotid ganglion; participation of endoderm in constitution of cranial ganglia, III, 278. Nerves of testis and interstitial gland, III, 466.
- De Wit, J. J. D., and Bretschneider, L. H., difference between stilbestrol and natural oestrogens, III, 582.
- De Witt, B. J., and Seltz, H., thermodynamic study of the zinc-antimony system; thermodynamic properties of the intermetallic compounds ZnSb, Zn₂Sb, and Zn₃Sb, I, 20.
- See also Seltz, H.
- De Witt, T. W. See Magee, J. L.
- Dexter, S. O. See Gessler, C. J.
- Dey, B. B., and Rajagopalan, S., isoquinoline series. IV. Syntheses of benzoisoquinolones; preparation of isoquinolines from naphthalene derivatives, II, 140.
- Dey, F. L., Fisher, C., Berry, C. M., and Ranson, S. W., disturbances in reproductive functions caused by hypothalamic lesions in female guinea-pigs, III, 809.
- See also Brookhart, J. M.
- Dharmatti, S. S., molecular structure of some tellurium compounds determined by magnetic method, I, 434.
- See also Prasad, M.
- Dhingra, D. R., and Haneef, M., fatty acids and glycerides of body fat of she-goats, III, 43.
- Dhodapkar, C. R., theoretical aspects of active nitrogen, I, 87.
- D'Hollander, F., and Gerebtzoff, M. A., optic tracts and their connexions, III, 298.
- Dhurandhar, C. B., and Boman-Behram, A. K., pigmentation of conjunctiva and its relation to nutrition, III, 802.
- Diaconescu-Putna, M. See Nitzescu, I. I.
- Diadusha, G. F., mesenchymal reaction of spleen and testis to inoculated tumour by cytotoxic stimulation or blockade of active mesenchyme, III, 141.
- Diamond, J. S., Siegel, S. A., Gall, M. B., and Karlen, S., use of secretin as clinical test of pancreatic function, III, 37.
- Siegel, S. A., and Myerson, S., biliary pigment curve during secretin test; diagnostic significance in non-functioning gall bladder, III, 586.
- Diamond, L. K., erythroblastic anæmias, III, 276.
- Dianova, E. V., and Voroschilova, A. A., obtaining bacteria-free cultures of protozoa (amœbæ), III, 610.
- Dias, F. See Athias.
- Diaz, J. T. See Williams, J. R., jun.
- Diban, P. A., application of cytotoxic antirreticular serum in eye diseases, III, 114.
- Dibeler, V. H. See Vosburgh, W. C.
- Di Bella, L., specific toxic substance of kidney, III, 418. Interrelationship between carotene and thyroid during growth of rats, III, 857.
- Di Benedetto, E. J., rôle of hypophysis and thyroid in asphyxial hyperglycæmia, III, 724.
- Dible, J. H., and Day, J. D., nature of fatty change in kidneys, III, 785.
- Di Capua, C. B., electrolytic method of oxidising arsenic and phosphorus for their determination in organic compounds, II, 240.
- Dick, A. T., effect of severe hæmorrhage on concentration of copper in blood of sheep, III, 90.
- Dick, G. F., and Stevens, D. S., photoelectric hæmoglobinometer, III, 559.
- Dick, M., respiratory and circulatory responses to intravenous oxygen and their relation to anoxæmia, III, 195.
- and Hooker, C. W., absence of acute effects of sex hormones, III, 131.
- Dick, R. C. S. See Briggs, P. J.
- Dickel, G. See Clusius, K.
- Dickens, F., metabolism of normal and tumour tissue. XVIII. Action of guanidines and amidines on the Pasteur effect, III, 147. Metabolism of tumours, III, 508.

- Dickens, F., and Weil-Malherbe, H., carbohydrate metabolism of tumours, III, 747.
- Dickens, K. L. See Heninger, B. R.
- Dickenson, W., effect of potassium salts on electrophoretic mobility of cetyl acetate emulsions, and on interfacial tension between cetyl acetate and water, I, 356.
- Dicker, E., rôle of kidney in pathogenesis of arterial hypertension, III, 633.
- Dickerson, R. T. See Hopkins, I. I.
- Dickerson, W. W. See Ross, A. T.
- Dickinson, R. G. See Dekker, A. O., Wilson, J. N., and Wood, R. E.
- Dickson, H. L. See Butler, T. C.
- Dickman, R. M. See Kramer, M. M.
- Dickman, S. R., and Bray, R. H., removal of phosphates from solutions of hydrogen peroxide, I, 371.
- Dickmann, C. H. See Mosto, D.
- Dickson, E. D. D., Ewing, A. W. G., and Littler, T. S., effects of aeroplane noise on auditory acuity of aviators, III, 26.
- Dickson, L. M., development of nerve endings in respiratory muscles of sheep, III, 178.
- Dieckhoff, J., effect of adrenal cortex hormone and vitamin-C on metabolism in diphtheria, III, 410.
- Diederichsen, J. See Mumm, O.
- Diehl, F. See Altenburger, E.
- Diehl, H. See Veraguth, A. J.
- Dieke, J. H. See Wood, R. W.
- Diels, O., and Preiss, H., polymerisation processes caused by pyridine. III. Intermediates in the polymerisation of *p*-benzoquinone, II, 107.
- and Thiele, W. E., diene syntheses. XXXIII. Acridine and methyl acetylenedicarboxylate, II, 108.
- Diemair, W., physiologically-active stimulants in foods and their detection, II, 260. Physiologically-active stimulants in foods and their chemical detection, III, 592.
- See also Bleyer, B.
- Dienst, C., causation of polycythæmia, III, 182. Thirst in patients with cardiac failure, III, 384. Acidosis and oedema, III, 630. Insulin and acid-base metabolism, III, 807.
- Diesnis, J. See Augier, P.
- Dieterle, K., temporary changes in *S-T* segment and *T* waves of the electrocardiogram, III, 14.
- Dietrich, H. F., tetanus in childhood, III, 762.
- Dietrich, S., and Schimert, G., jun., action of nicotine on circulation, III, 249.
- See also Alberts, G. G.
- Dietz, E. See Bezssonoff, N.
- Dietz, F. C. See Marvel, C. S.
- Dietz, N. See Jorgensen, M. N.
- Dietz, W., risk of accident with constant-boiling 72% perchloric acid, I, 36.
- Diges, L. W., and Keith, A. J., blood banking, III, 285.
- Di Giorgio, A. M., changes in pupil reflex to light after rotatory excitation of labyrinth, III, 893. Changes in near point, acuity of vision, and discrimination of light intensity following stimulation of labyrinth, III, 893.
- Di Giulio, T., and Tondo, M., relations of inferior thyroid artery, III, 85.
- See also Tondo, M.
- Dijk, C. P. van. See Reith, J. F.
- Dijk, J. van. See Wibaut, J. P.
- Dijk, J. A. van, circulatory changes in nutrient artery of contracting muscles, III, 384. Effect of sympathetic stimulation on skeletal muscle, III, 390.
- Dijk, P. J. van. See Arisz, W. H.
- Dijkstra, C., and Moyons, A. K. M., sensitivity to acetylcholine of smooth muscle of the frog's lung, III, 294.
- Dikshit, B. B. See Sokhey, S. S.
- Dill, D. B., and Edwards, H. T., pulmonary gaseous exchanges at low barometric pressure and in air mixed with nitrogen, III, 635.
- Johnson, R. E., and Daly, C., metabolic and cardiovascular effects of intramuscular injections of adrenaline and amphetamine, III, 408.
- and Zamcheck, N., respiratory adjustments to oxygen-lack in presence of carbon dioxide, III, 794.
- Dill, L. V., and Isenhour, C. E., incidence and cause of fever in patients with bleeding peptic ulcers, III, 133. Attempt to produce increased susceptibility to renal ischæmia in rabbits by endocrine preparations, III, 634.
- Isenhour, C. E., and Cadden, J. F., effect of quantitative reduction of renal blood flow on pregnant rabbit, III, 127.
- Dille, J. M., and Hazleton, L. W., depressant action of picrotoxin and metrazol, III, 154.
- and Seeberg, V. P., elimination of metrazol, III, 926.
- and Squier, P. A., pharmacology of ethyl thioncarbamate, III, 602.
- See also Duff, D. M., and Schulte, J. W.
- Dillon, B. M. See Steinbach, M. M.
- Dillon, J. B. See Hertzman, A. B.
- Dillon, J. R., jun. See Richardson, A. P.
- Dillon, T., and O'Colla, P., acetolysis of carrageen mucilage, II, 245.
- Dilthey, W., and Huchtemann, P., highly arylated compounds. IX. Highly arylated fulvenes, II, 159.
- Inckel, M., and Stephan, H., pyrenium compounds. XXXV. Oxidation of ketones with hydrogen peroxide, II, 169.
- Dima, G. A., and Pogăncănu, P., ultraviolet absorption spectra of oxygenated acridine derivatives: acridine *N*-oxide, acridone, 5-hydroxyacridine *N*-oxide and its sodium salt, and 5-methoxyacridine *N*-oxide, I, 93.
- Di Marco, I. See Felix, K.
- Dimick, M. K., difference between thiamin deficiency in rats and deficiencies of other members of vitamin-B complex, III, 914.
- Dimitrijević, D. M. See Lecco, A. M., and Pushin, N. A.
- Dimitriu, C. C., Comsa, G., Tanasoca, T., and Schwartz, L., clinical and therapeutic aspects of hypochloræmic azotæmia, III, 95.
- and Gingold, N., acquired acholuric jaundice, cured by splenectomy, III, 184.
- See also Tudoranu, G.
- Dimler, R. J., and Link, K. P., mutarotation and rotatory dispersion of derivatives of aldehydo-*D*-galacturonic acid, II, 267.
- Di Molfetta, N., diffusion and fixation of gold salts in bones, III, 277.
- Dimroth, K., attempted synthetic preparation of antirachitic vitamins. IV. Preparation of 4-hydroxycyclohexanone, II, 133.
- See also Windaus, A.
- Di Natale, S., microscopic observation of circulation in frog's lung and bladder, III, 100.
- Dinelli, D., catalytic action of silver, I, 33.
- Dinerman, J., beneficial action of antireticular cytotoxic serum in various diseases, III, 881.
- Dingemans, E., colour reaction of diethylstilbæstrol (4:4'-dihydroxy- α -diethylstilbene), II, 305.
- and Eck, W. F. van, wheat-germ oil and tumour formation, III, 44.
- Laquer, E., and Mühlbock, O., urinary excretion of oestrogenic hormones in pregnant women, III, 127.
- Dingenen, W. van. See Iiterbeek, A. van.
- Dinger, J. E., and Kunerth, W., effect of low temperature on intensity of fluorescence, I, 311.
- Dingle, J. H. See Ham, T. H.
- Dinglinger, A. See Schulz, G. V.
- Dinischiottu, G. T. See Hochrein, M.
- Dinkin, M. E. See Danilov, S. N.
- Di Paola, G. See Del Castillo, E. B.
- Dippel, A. L., rôle of hysterectomy in production of menopausal symptoms, III, 127.
- Dippy, J. F. J. See Jenkins, H. O.
- Di Prisco, L., respiration during carbon monoxide coma, III, 195.
- Dirkse, T. P. See Briscoe, H. T.
- Dirksen, A. J. See Rusch, H. P.
- Dirr, K., and Logel, R., comparison of Weltmann's coagulation band with Takata reaction, sedimentation rate, and direct bilirubin determinations in serum, III, 12.
- and Stingel-Munzert, H., technique of blood-sugar determination, III, 472.
- Dische, Z., phosphorylation of glucose in the initial and stationary phases of alcoholic fermentation by live yeast, III, 536.
- Dischreit, J., action of testis hormone ["erugon"] on prepubertal rat testis, III, 582.
- Discombe, G. See Vartan, C. K.
- Dischoeck, H. A. E. van, influence of variation in air pressure on hearing, III, 400.
- and Jongkees, L. B. W., bleeding time, III, 628.
- Di Somma, A. A., constitution of conjugated phenolphthalein formed in the animal body, III, 435.
- Dittmar, C., presence of *d*(-)-glutamic acid in tumour proteins, III, 317.
- See also Sheppard, S. E.
- Dittmar, F., reflex scoliosis in diseases of urinary tract, III, 21.
- Dittmer, K. H., and Gustavson, R. G., equivalent weights of salts of organic acids; micro-determination by electro-dialysis, II, 264.
- Di Vajo, U. See Tappi, G.
- Divilkovski, M., absolute method of measuring the dielectric constant and losses in liquids by means of decimetre waves, I, 133.
- Diwany, M., sternal marrow puncture in children, III, 837.
- Dixit, K. R., variation of intensity along an electron reflexion ring, I, 350. Superconductivity, I, 400.
- Dixon, J. K., absorption coefficient of nitrogen dioxide in the visible, I, 191.
- Dixon, M., and Zervas, L. G., rôle of co-enzymes in dehydrogenase systems, III, 448.
- See also Zervas, L. G.
- Dixon, S. F., and Cox, G. J., preferential mottling of enamel of rat molars, III, 277.

- Dixon, S. F. See also Cox, G. J.
 Dizerbo, L. See Machebœuf, M. A.
 Djakova, M. K. See Lozovoi, A. V.
 Djatschkovski, S. I., and Orlenko, A. F., electro-capillary method of qualitative analysis, I, 299.
 Djegovan, V., Nernst heat theorem, I, 154.
 Dju, M. Y. See Yang, E. F.
 Dmitriev, N. N., Petrijhak, K. A., and Perfilov, N. A., possibility of formation of α -radioactive nuclei in decay of radiochlorine, I, 3.
 Dmochowski, L., serological specificity of experimental tumours; serological specificity of benzpyrene tumours of rats, III, 44.
 and Knox, R., complement-fixing antigen common to filterable and non-filterable tumours of fowls, III, 141.
 See also Foulds, L.
 Doak, B. W., clarification of plant extracts for determination of reducing sugars, III, 370.
 Doak, G. O., modified Bart reaction, II, 111. Preparation of alkali bismuth saccharates, II, 204.
 Eagle, H., and Steinman, H. G., preparation of phenylarsinoides. I. Mono-substituted derivatives, II, 111.
 Doan, C. A., reticulo-endothelial system, III, 276. Origin and developmental potentialities of blood cells, III, 787.
 See also Hargraves, M. M., Wilson, S. J., and Wiseman, B. K.
 Dobbins, N. E., Gee, K. W., and Rees, W. J., high-sensitivity radiation pyrometer, I, 420.
 Dobriner, K., and Rhoads, C. P., porphyrins in health and disease, III, 703.
 Dobrinskaja, A. See Gniubkin, V.
 Dobrjanski, A. F., genetic classification of caustobioliths, III, 775.
 Dobronarvin, P. P., and Chvostikov, I. A., luminescence spectra of the night sky in the ultra-violet region, I, 241.
 Dobrotnin, N. See Veksler, V.
 Dobrovolskaja, N. K. See Medox, G. V.
 Dobrovolskaja-Zavadskaja, N., hereditary and environmental factors in origin of different cancers, III, 747.
 See also Zéphiroff, P.
 Dobrowsky, A., purification of mercury, I, 228.
 Dobry, (Mme.) A., coacervation, I, 255.
 and Huin, O. C., osmotic pressure; influence of chemically indifferent substances, I, 161.
 Dobszay, L., hormonal reactions of pregnancy, III, 31.
 Dobyns, B. M. See Wintrobe, M. M.
 Dobzhansky, T., experimental studies on genetics of free-living population of *Drosophila*, III, 3.
 Docken, A. M., and Spielman, M. A., synthesis of dihydrodiethylstilbestrol, II, 341.
 Dockeray, G. C. See Pringle, B.
 Dockerty, M. B., dysgerminoma, III, 809.
 Dockhorn, E. See Denecke.
 Docking, A. R., lyotropic series and adsorption, I, 22.
 Heymann, E., Kerley, L. F., and Mortensen, K. N., evaporation of water through multimolecular films, I, 410.
 Doctor, N. S., and Banerjee, B. N., effect of anti-oxidants on stability of vitamin-A in ghee exposed to sunlight, III, 232.
 See also Ramasarma, G. B.
 Dodd, F. R., starch from unripe tomatoes, III, 273.
 Dodd, H., pressor drugs in surgery, III, 522.
 Dodd, H. G., ether convulsions, III, 925.
 Dodd, K. See Minot, A. S.
 Dodds, E. C., diagnostic value of urinary hormones, III, 206. Suprarenal hormones, III, 210. Corpus-luteum hormone, III, 212. Female sex hormone, III, 212. Male sex hormone, III, 216.
 See also Campbell, N. R.
 Dodel, P., Dastugue, G., and Bresson, A., effect of morphine and derivatives on sensitivity of leech muscle to acetylcholine, III, 600.
 Dastugue, G., and Villedieu, pharmacodynamic action of saponins, especially of saponin of *Dumoria heckeli*, III, 338.
 Dodge, B. F. See Miller, P., and Wan, S. W.
 Dodson, H. See Nielsen, J. R.
 Dodson, R. W., and Fowler, R. D., products of uranium fission; radioactive isotopes of iodine and xenon, I, 307.
 See also Coryell, C. D.
 Doe, W. B. See Friedman, H. B.
 Doeglas, D. J., distinguishing quartz and untwinned feldspar with the universal stage, I, 303.
 Doeller, W., ethyl α -keto- δ -2-benzoxazolyld Δ^7 -pentenoate, II, 143.
 Dömösi, P., micro-determination of total, acid-soluble, and lipid-phosphorus content of blood, III, 379.
 and Egyed, N., resorption of cholesterol through alimentary tract of rabbits, III, 415.
 Doering, W. E., and Noller, C. R., system magnesium *n*-butyl bromide-magnesium bromide-ethyl ether, I, 117.
 Doeschner, R. N. See Osborne, D. W.
 Dœuvre, J., l-citronellol, II, 149.
 Dogra, J. R., radiological studies of alimentary tract of normal monkey (*Macacus sinicus*), III, 812.
 Dohan, F. C., and Lukens, F. D. W., anti-hormone effects in pancreatic diabetes, III, 209.
 Dohan, J. S., glycolic acid oxidase, III, 931.
 Doherty, C. J. See Erwin, G. S.
 Doherty, D. G., Stein, W. H., and Bergmann, M., aromatic sulphonic acids as reagents for amino-acids, II, 365.
 Dohlman, G., camera for stereoscopic colour photographs of tympanic membrane, III, 118. Mechanism of transformation into nystagmus on stimulation of semicircular canals, III, 205.
 Doi, K. See Uzumasa, Y.
 Doisy, E. A. See Binkley, S. B., Huffman, M. N., Katzman, P. A., MacCorquodale, D. W., McKee, R. W., Richert, D., and Thayer, S. A.
 Doladilhe, M., dehydration of blood serum; application to syphilitic serum, III, 380.
 and Mazille, M., dissociation of agglutinin and sensitizer of hæmolytic serum, III, 359.
 Dolan, L. P., allergic death from diodrast, III, 339.
 Dolby, D. E. See Macfarlane, M. G.
 Doldi, S., determination of organic sulphur in gases, II, 60.
 Dole, M., triple ions and transference numbers, I, 75.
 and Slobod, R. L., isotopic composition of oxygen in carbonate rocks and iron oxide ores, I, 274.
 Dolger, H. See Pollack, H.
 Dolgopel, V. B., and Hobart, H. M., granulocytopenia from sulphapyridine, III, 8.
 Dolgov, B. N. See Abramova, N. M.
 Doljanski, L., and Hoffman, R. S., cancer cell and growth-regulating system of the body, III, 747.
 Hoffman, R. S., and Tenenbaum, E., stimulation of growth *in vitro* fibroblast colonies by extracts of adult tissue, III, 4.
 and Pikovski, M., cultivation of agent of fowl leucosis *in vitro*, III, 854.
 See also Hoffman, R. S.
 Dolkart, R. E. See Chor, H.
 Doll, W. See Hüchel, W.
 Dolley, F. S. See Bullock, L. T.
 Dollfuss, A., ocular complications of irradiation (radium and X-ray), III, 573.
 Dolliver, M. A. See Ansbacher, S.
 Dolman, C. E. See Helmer, D. E.
 Domagk, G., chemotherapy of bacterial infections, III, 598.
 Domanski, T. J., double pipette for non-protein-nitrogen and sugar determinations, III, 619.
 Dombrowski, (Frl.) A., simplified micro-determination of carbon and hydrogen in organic compounds. I. Combustion of compounds containing carbon, hydrogen, and oxygen. II, II, 263.
 Domini, G. See Spadolini, I.
 Domm, L. V., intersexuality in adult brown Leghorn male as result of oestrogenic treatment during early embryonic life, III, 215.
 Domin, N. A., cyclic systems with a triple linking. III. Attempted introduction of a triple linking into a substituted six-membered ring, II, 159.
 Don, C. S. D., Luxton, R. W., Donald, H. R., Ramsay, W. A., Macartney, D. W., Smith, G. S., and Adderley, C. H., sulphapyridine in pneumonia, III, 521.
 Donahue, J. K., oestrogenic properties of extracts of ovaries of marine invertebrates, III, 215.
 Donald, C. J., and Brown, P. W., ulcerative colitis, III, 742.
 Donald, C. M. See Riceman, D. S.
 Donald, H. R. See Don, C. S. D.
 Donaldson, L. R. See Norris, E. R.
 Donally, H. H., food allergy in children, III, 774.
 Donatelli, L., vasomotor reflexes of sino-carotid origin in sheep foetus, III, 16. Pharmacology of urinary bladder, III, 62. Effect of gardenal on autonomic nervous system, III, 62. Stabilisation of readily oxidised, pharmaceutical substances, III, 67. Effect of ergobasine on carotid-sinus reflexes, III, 100. Function of carotid sinus in foetus, III, 476. Sensitivity of sino-carotid chemoreceptors in sheep's foetus, III, 841. Effect of adrenaline and ergot alkaloids on muscle of iris of isolated frog's eye, and bronchial muscles, III, 896.
 and Ingiulla, W., artificial respiration during respiratory anaesthesia by barbiturates, III, 862.
 and Scigrà, S., effect of parasympathomimetic drugs on isolated bladder of rabbit, III, 923.
 See also Abbate, R., Aiazzi-Mancini, M., and Benelli, R.
 Donath, W. F. See Sjollema, B.
 Donnelly, M. W. See Beck, W. A.

- Donelson, E. G., Leichsenring, J. M., and Wall, L. M., diameter of red blood cells in healthy young women, III, 468.
See also Leichsenring, J. M.
- Donen, I., and Roux, E. R., rôle of sorbitol in carbon metabolism of the Kelsey plum. II. Relation of carbohydrate and acid loss to CO₂ production in stored fruit, III, 173.
- Dongen, K. van, action of F. 933 on fibrillation of heart, III, 250. Action of narcotine and thebaine on respiration, III, 442.
and Bijlsma, U. G., action of quinidine and hydroquinidine on auricular fibrillation, III, 153.
- Doniach, I., and Mottram, J. C., photodynamic hæmolysis by 3:4-benzpyrene, III, 669. Effect of light on incidence of tumours in painted mice, III, 814.
- Doniger, C. R. See Cameron, G. R.
- Donleavy, J. J., and English, J., jun., alkamine esters of disubstituted methylcarbamie acids, II, 78. Synthesis of alkamine esters of alkylthiolbenzoic acids, II, 86.
- Donnelly, H. H., culture vaccine virus for smallpox, III, 268.
- Donnay, J. D. H., crystal space-groups determined without X-rays, I, 150.
and Harker, D., tables of extinction for the 230 crystallographic spatial groups, I, 245.
- Donnelly, M. W. See Beck, W. A.
- Donohue, W. L., pathology of intervertebral disc, III, 177.
- Donovan, D. K., spectrophotometer for controlling colour, I, 234.
- Donovan, E. See Davison, R.
- Donovan, E. J. See McIntosh, R.
- Donovan, P. B. See Dragstedt, L. R., and Harsh, G. F.
- Dor, M., functional recovery and metabolism of transplanted non-anæsthetised kidneys following prolonged ischæmia, III, 222. Oxygen consumption and carbon dioxide production in transplanted non-anæsthetised kidney, III, 222.
and Dumont, L., normal adult hæmoglobin, III, 469.
- Dorche, J. See Leulier, A.
- Dordoni, F., new type of [animal] cage for experiments on hypochromic anæmia and metabolism of heavy metals, III, 778.
- Dorf, F. B. See Emerson, W. S.
- Dorff, G. B., hormonal treatment of hirsuties, III, 724. Chorionic gonadotropic effects on height and osseous development in sexually underdeveloped young boy, III, 904.
- Dorfman, A., Koser, S. A., Horwitt, M. K., Berkman, S., and Saunders, F., quantitative response of dysentery bacillus to nicotinamide and related compounds, III, 770.
Koser, S. A., and Saunders, F., effect of nicotinamide on respiration of dysentery bacilli, III, 355.
See also Koser, S. A.
- Dorfman, M., quantitative mineralogical analysis applicable to nepheline syenites and other nepheline-bearing rocks, I, 333.
- Dorfman, R. I., conversion of ætioallocholan-3:17-dione into androsterone, III, 413. Can strophanthin maintain adrenalectomised mice? III, 728.
- Dorfman, R. I., Cook, J. W., and Hamilton, J. B., conversion of testosterone into androsterone in man, III, 131.
and Fish, W. R., conversion of testosterone into ætioallocholan-3(β)-ol-17-one, II, 329.
and Hamilton, J. B., metabolism of testosterone to androsterone, III, 646.
- Wilson, H. M., and Peters, J. P., differential diagnosis of [pituitary] basophilism and allied conditions, III, 730.
See also Boatner, C. H., and Fish, W. R.
- Dorland, R. M., Hawkins, W. L., and Hibbert, H., lignin and related compounds. XLVI. Action of ozone on isolated lignins, II, 19.
and Hibbert, H., formic acid as a solvent for ozonisation investigation, II, 117.
- Dorn, H. F., mortality rates and economic status in rural areas, III, 341. Incidence of cancer in Cook County, Illinois, 1937, III, 509.
- Dornheggen, H. See Tietz, E. B.
- Dornow, A., β-substituted α-picolines, II, 287. Direct synthesis of 2-hydroxy-3-cyanopyridine and its 6-methyl derivative, II, 314. Heterovitamin-B₁, 1-(4'-amino-2'-methyl-5'-pyrimidyl-methyl)3-β-hydroxyethylpyridinium bromide, II, 314. Action of diazomethane on acid chlorides of the pyridine series, II, 356.
See also Baumgarten, P.
- Dorp, D. A. van. See Westenbrink, H. G. K.
- Dorresteijn, R. See Wassink, E. C.
- Dorris, F., behaviour of pigment cells from cultures of neural crest when grafted back into embryo, III, 783.
- Dorwart, F. G., "slow" adrenal toxicity, III, 409.
- Dory, E. See Putzeys, P.
- Dorzbaeh, E. See Ludwig, W.
- Dosne, C. See Selye, H.
- Doss, K. S. G. See Ramaiah, K. S.
- Doster-Virtue, M. E. See Virtue, R. W.
- Dott, D. B., strychnine compound of Bordeaux B (strychnine azorubrate), II, 59. Action of acetylsalicylic acid on teeth, III, 928.
- Doty, G. E. See Brock, S.
- Doty, P. M. See Aston, J. G.
- Doubilet, H., and Bierman, W., effect of hyperpyrexia on tonus of human common bile duct and cardiac sphincters, III, 584.
Yarnes, H., and Winkelstein, A., bile salt therapy in gall-bladder disease, III, 136.
See also Shapiroff, B. G. P.
- Doubrow, S. See Rathery, F.
- Doudoroff, M., adaptation of *Escherichia coli* to sodium chloride, III, 688.
- Dougherty, E. Y., geological features of Kolar, "Porcupine, and Kirkland Lake, I, 136.
- Dougherty, G. See Haas, O., and Lee, S. W.
- Dougherty, P. See Borsook, H.
- Dougherty, T. F. See Turley, L. A.
- Doughty, J. F., sulphanilamide cyanosis relieved by nicotinic acid, III, 599.
- Douglas, A. E., and Herzberg, G., spectroscopic evidence for the B₂ molecule, I, 281.
- Douglas, A. G., hematoporphyrin and blood-sugar, III, 472.
- Douglas, C. G. See Courtice, F. C.
- Douglas, D. M., and Mann, F. C., rhythmic contractions in small intestine of the dog, III, 38. Activity of lower part of ileum of dog in relation to ingestion of food, III, 39. Gastro-ileac reflex, III, 501.
- Doumani, T. F., and Kobe, K. A., p-cymene. IV. Mononitration of 2-amino-p-cymene; preparation of 3-amino-p-cymene and o- and p-cymylenediamine, II, 162.
- Dounce, A. L. See Sumner, J. B.
- Doupe, J. See Bazett, H. C.
- Dovan, J. S., numerical system using colours for marking albino rats and mice, III, 778.
- Dovaz, R., effect of folliculin on secretion of mucus in vagina of pregnant guinea-pigs, III, 735.
- Dover, C. W., and Sivasubramanian, V., composition of milk secretion obtained prior to and after calving, III, 420.
- Dow, D., and Zuckerman, S., vaginal pH of monkeys treated with oestrogenic substances, III, 212.
- Dow, R. B. See Matthews, J. E., jun., and Morgan, H. E.
- Dow, R. S., cerebellar action potentials in response to stimulation of various afferent connexions, III, 200. Partial agenesis of cerebellum in dogs, III, 717.
See also Bremer, F.
- Dowdell, R. L. See Forsyth, A. C.
- Dowell, J. H., new mounting for an industrial grating spectrograph, I, 374.
- Dowling, H. F., and Abernethy, T. J., treatment of pneumococcus pneumonia: comparison of results obtained with specific serum and sulphapyridine, III, 330.
See also Abernethy, T. J.
- Dowling, J. J., comparing resistances of four-terminal resistors, I, 83.
- Downey, H., infectious mononucleosis, III, 276.
and Nordland, M., study of case of myeloid megalokaryocytic hepato-splenomegaly, III, 7.
- Downing, J. G., dermatitis due to [nickel in] safety pins, III, 527.
and Gurney, S. W., dermatitis from cashew nut-shell oil, III, 684.
See also Handley, F.
- Downing, J. R. See Buswell, A. M., and Vestling, C. S.
- Downing, V. See White, F. W.
- Downman, C. B. B., Oliver, J. O., and Young, I. M., potassium partition in stored blood, III, 705.
- Dowson, W. J., identity of the bacterium causing potato blackleg, III, 451.
- Doyle, W. L., amylase in *Amphioxus*, III, 261.
- Dozzi, D. L., determination and significance of urinary amylase, III, 587. Factors governing incidence of cerebro-vascular crises, III, 794. Evaluation of methods for determining blood and urinary amylase, III, 932.
- Drabkin, D. L., ultra-violet photo-electric spectrophotometer, I, 330. Spectrophotometric studies on hæmoglobin, its derivatives, and related compounds, III, 703.
- Drach, P., and Teissier, G., moulting and blood-protein in crabs, III, 286.
- Dracontidis, C., inversion of limits of fields of vision for colours in quinine amblyopia, III, 117.
- Dragstedt, C. A., anaphylaxis and allergy, III, 339.
- Gray, J. S., Lawton, A. H., and Ramirez de Arellano, M., does alcohol stimulate gastric secretion by liberating histamine? III, 500.

- Dragstedt, C. A., Ramirez de Arellano, M., and Lawton, A. H., peptone shock in foetal dogs and its significance in metabolism of histamine, III, 524. Relationship of histamine to anaphylaxis in the rabbit, III, 823.
See also Ramirez de Arellano, M.
- Dragstedt, L. R., lipocaic, III, 310.
- Donovan, P. B., Clark, D. E., Goodpasture, W. C., and Vermeulen, C., relation of lipocaic to blood- and liver-lipids of depancreatized dogs, III, 219.
- Vermeulen, C., Goodpasture, W. C., Donovan, P. B., and Geer, W. A., lipocaic and fatty infiltration of the liver in pancreatic diabetes, III, 239.
See also Dack, G. M.
- Drăgulescu, C. See Murgulescu, I. G., and Spacu, G.
- Drake, M. E., Haury, V. G., and Gruber, C. M., action of sodium diphenylhydantoinate (dilantin) on excised and intact uterus, III, 252.
- Modern, F. S., Renshaw, R. J. F., and Thienes, C. H., pharmacological study of intestinal nerves, III, 199.
See also Gruber, C. M., and Haury, V. G.
- Drake, N. L., and Wolfe, J. K., cerin and friedelin. V. Friedonic acid, II, 18.
- Drake, T. G. H. See Branion, H. D., and Ham, A. W.
- Drawe, C. E. See Ashman, R.
- Drawert, H., intake and accumulation of Prune pure by plant cells, III, 939.
- Dreblow, W., and Rajewsky, B., directional counter tube, I, 376.
- Dreby, E. C. See Harned, H. S.
- Dreguss, M., volumetric and gravimetric determination of sodium in biological material, III, 370.
See also Taylor, R. M.
- Dreher, M., changes in red cell count following gastrectomy, III, 182.
- Dreisbach, R. R., reduction of specific gravity at 25°/25° to density at any temperature from 0° to 40°, I, 273.
- Dreisch, T., and Kallscheuer, O., absorption of coloured inorganic salt solutions in the near infra-red, I, 94.
- Dremliuk, R. L., application of pyrrole to detection of ions by drop reactions, I, 301.
- Drenckhahn, C. H., prevention of hæmorrhages from œsophageal varices in cirrhosis and Banti's disease, III, 8.
- Dressen, W. C., pneumoconiosis among mica and pegmatite workers, III, 929.
- Dresser, R., Rude, J. C., and Cosman, B. J., differences between 200 kv. and super-voltage roentgen therapy, III, 825.
- Dressler, M. See Rossier, P. H.
- Dressnandt, H., and Schottky, W., anti-ferromagnetic transition point of vanadium dioxide, I, 139.
- Drever, H. I., petrological study of limestones in the Moine Series of Ardgour, Argyllshire, I, 238.
- Drevon, B., and Roussin, Kjeldahl determination of nitrogen in alkaloids in presence of complex mercury, copper, and selenium catalysts. I. General. II. Experimental results, II, 200.
- Drew, C. R., Edsall, K., and Scudder, J., blood preservation, III, 186.
See also Scudder, J., and Smith, M. E.
- Drew, H. D. K., and Dunton, F. G., quadrivalent vanadium lakes of azo-dyes, II, 340.
See also Beech, W. F.
- Drew, J. E. See Vest, S. A.
- Dreyfuss, A. See Meunier, P.
- Dreyfuss, M. L., metabolism of human endometrium with special reference to adenomyosis and hyperplasia of endometrium, III, 590.
- Drigalski, W. von, serum-vitamin-C level and vitamin-C deficiency, III, 145. Vitamin-A deficiency in man; value of "adaptometry," III, 231. Vitamin-A requirement in man, III, 857.
and Kunz, H., vitamin-A requirements in man, III, 511.
- Drikos, G. See Schwab, G. M.
- Drill, V. A., and Hays, H. W., hyperthyroidism and liver function in relation to B vitamins, III, 750.
See also Collings, W. D.
- Drinker, C. H., formation and movement of lymph, III, 294.
- Drinker, C. K. See Maurer, F. W., and Yoffey, J. M.
- Drinker, N., Green, A. A., and Hastings, A. B., equilibria between calcium and purified globulins, III, 286.
- Drinkwater, J. W., Richardson, (Sir) O., and Williams, W. E., determination of the Rydberg constants, e/m , and fine structures of H_α and D_α by means of a reflexion echelon, I, 191, 335.
- Dripps, R. D. See Schmidt, C. F.
- Drips, D. G., and Osterberg, A. E., evaluation of colorimetric and biological methods for determining urinary androgens, III, 902.
- Driscoll, R. I., Hodge, M. W., and Ruark, A. E., interval meter and its application to studies of Geiger counter statistics, I, 420.
- Driver, J. E. See Bell, H. E.
- Driver, J. R. See Cole, H. N.
- Driver, R. L. See Sealock, R. R.
- Drobnik, R. See Glaser, E.
- Drohocka, J. See Drohocki, Z.
- Drohocki, Z., and Drohocka, J., effect of evipan on electro-encephalogram, III, 200. Changes in electroencephalogram [electro-encephalogram] produced by narcosis, III, 299.
- Drosdovsky, C. See Zéphiroff, P.
- Drossner, J. L. See Elsom, K. A.
- Drozdoz, N. S., meso-derivatives of acridine. X. Preparation of 2-chloro-7-methoxy-5-(8-diethylamino- α -methylbutyl)-aminoacridine. XIV. Alkylated 5-chloroacridines, II, 55.
and Ignatiuk-Maistrenko, V. A., Herz's reaction, I, 30.
and Stavrovskaja, V. I., *p*-aminobenzenesulphonamide derivatives, II, 164.
See also Drozdov, S. S.
- Drozdoz, S. S., and Drozdov, N. S., biochemical changes caused in muscle tissue by freezing, III, 106. Autolytic changes in muscle tissue at low temperatures, III, 106.
- Druckrey, H. See Brock, N.
- Drugman, J., twinnings and groupings of phenocrysts of feldspar and of β -quartz, I, 86.
- Drumm, P. J., and O'Connor, W. F., pigments of sponges, III, 420.
- O'Connor, W. F., and Reilly, J., stabilised diazo-complexes with piperazine and other bases, II, 260. Molecular rearrangement of tertiary aralkylanilines, II, 273.
- Drummond, D. G., anisotropy of cellulose sheet, I, 148.
- Drummond, D. H., Tollman, J. P., Bisgard, J. D., and Ross, D., phosphatase activity of infected fractures, III, 698.
- Drummond, D. H., Tollman, J. P., and Richards, F. L., effect of X-irradiation on erythrocytes, III, 375.
See also Tollman, J. P.
- Drummond, J. C., Gray, C. H., and Richardson, N. E. G., antirachitic value of human milk, III, 236.
- Noble, R. L., and Wright, M. D., relationship of vitamin-E to endocrine system, III, 583.
See also Cuthbertson, W. F. J., and Wright, M. D.
- Drury, D. R., and Greeley, P. O., measurement of insulin action, III, 304.
See also Bergman, H. C., Martin, H., and Tyler, D. B.
- Drushinin, I. G., conversion of astrakhanite, I, 45.
- Drushinina, O. S. See Skljarenko, S. I.
- Dry, T. J., and Willis, P. A., interpretation of electrocardiographic findings in calcareous stenosis of aortic valves, III, 563.
- Dryden, L. P. See Hall, S. R.
- Dryński, T., and Smoluchowski, R., X-ray absorption edges of gaseous, liquid, and solid germanium tetrachloride, I, 1.
- Drzewina, A. See Bohn, G.
- Dubach, R. See Hartman, F. A.
- Dube, G. P., and Das Gupta, H. K., London-van der Waals forces between two disc-like particles, I, 254.
See also Levine, S.
- Dube, H. L., kinetics of sol-gel transformation. IV. Influence of purity of the sol on setting of ferric arsenate and ferric phosphate gels, I, 321.
and Prakash, S., kinetics of sol-gel transformation. III. Influence of temperature on setting of inorganic gels, I, 321.
- Dubertret, L., genesis and age of green Syrian rocks, I, 86.
- Dublin, W. B., mitosis in normal endometrium, III, 808.
- Boothby, W. M., Brown, H. O., and Williams, M. M. D., analysis of mixtures of helium, oxygen, and nitrogen by determining velocity of sound, I, 419.
- Boothby, W. M., and Williams, M. M. D., determination of velocity of sound in a gas; analysis of mixtures of helium, oxygen, and nitrogen, I, 134.
and Williams, M. M. D., voice changes with mixture of helium and oxygen, III, 887.
- Dubnoff, J. W. See Borsook, H.
- Dubois, A., and Ballion, M., oils as protectors of bacteria against heat, III, 544.
- DuBois, A. S. See Stevens, P. G.
- DuBois, D. See Stern, K. G.
- DuBois, E. F., heat loss from body, III, 824.
See also Hardy, J. D.
- DuBois, F. S. See Foley, J. O.
- Dubois, K. P., Moxon, A. L., and Olson, O. E., effectiveness of arsenic in preventing selenium poisoning, III, 857.
See also Moxon, A. L.
- Dubos, R. J., bactericidal agent extracted from soil bacillus. I. Preparation of agent; its activity *in vitro*. II. Protective effect of the agent against experimental pneumococcus infections in mice, III, 264. Effect of specific agents extracted from soil micro-organisms on experimental bacterial infections, III, 687.
and Cattaneo, C., bactericidal agent extracted from soil bacillus, III, 451.

- Dubos, R. J. See also Hotchkiss, R. D.
- Dubost, P., and Allinne, M., detection and determination of synthetic anti-malarials in urine, III, 224.
- Dubourg, J. See Dupont, G.
- Duboux, M., and Pièce, G., hydrogen-ion activity and catalysis of ethyl diazoacetate by organic acids, I, 163.
- Dubovtzeva, L. A. See Palladina, L. I.
- Duboy, J. See Machebœuf, M. A.
- DuBridge, L. A., Barnes, S. W., Wiig, E. O., Buck, J. H., and Strain, C. V., radioactivities induced by high-energy protons, I, 339.
- and Marshall, J., radioactive isotopes of strontium, yttrium, and zirconium, I, 340.
- See also Le Page, W. R.
- Dubrisay, R., action of vapours on metals, I, 125. Chemical reactions between substances sparingly volatile in a high vacuum, I, 227. Alteration of metals by organic acids dissolved in non-aqueous liquids, I, 298.
- Dubský, J. V., systematic utilisation of atomic groups in analytical chemistry. XI. Relation between constitution and analytical properties, I, 301.
- Dubuisson, M., alterations of p_H and changes in isoelectric point of myosin during muscular lengthening and contraction, III, 713.
- and Debot, A., stable valve voltmeter, III, 778.
- Duca, C. J. See Steinbach, M. M.
- Duchateau, G. See under Duchateau-Bosson, G.
- Duchateau-Bosson, G., and Florkin, M., phenolase activity of vertebrate tissues and formation of adrenoxine, III, 409.
- Florkin, M., and Frappez, G., enzymes influencing purine catabolism in hepatopancreas of crustaceans, III, 417. Enzymes of purine catabolism in insects, III, 517. Purine catabolism of anodonts, III, 517.
- See also Florkin, M.
- Duchon, R., high proportions of mesothorium I in mineral waters of Châtel-Guyon (Puy-de-Dôme) and of radium in boring water from Martres d'Artières (Puy-de-Dôme), I, 178.
- Duckworth, J., Godden, W., and Warnock, G. M., effect of acute magnesium deficiency on bone formation in rats, III, 231.
- Duclaux, J., transparency of the atmosphere. VI. White mist, I, 191. Brownian movement and the Einstein formula, I, 254.
- See also Amat, M.
- Ducuing, J., Bugnard, L., and Miletzky, O., action of X-rays on exteriorised circulating blood, III, 376.
- Dudek, J., bactericidal action of short-wave radiation, III, 269.
- Dudler, W., serum-phosphatase in hyperthyroidism, III, 29.
- Dudnik, V. V. See Korenman, I. M.
- Dührkop, H. See Kuhn, W.
- Duez, G., citraconitrile, II, 157.
- Dufait, R., acetylcholine, acetylcholinesterase, and choline-esterase, III, 347.
- and Massart, L., sodium fluoride as inhibitor of fermentations, III, 347.
- See also Massart, L.
- Dufay, J., CH bands in comet spectra, I, 282.
- Duff, D. M., and Dille, J. M., distribution and rate of elimination of picrotoxin, III, 154.
- Duffee, F. W., electrical method for collecting semen from fur-bearing animals, III, 369.
- Duffield, J. W., time savers for fixing and dehydration, III, 627.
- Duffy, C. E., and Mitchell, A. G., correlation of reaction to Schick test and diphtheria antitoxin content of serum in children with scarlet fever, III, 688.
- See also Sabin, A. B.
- Dufrasse, C., and Priou, R., dissociable organic oxides; oxidation of 9:10-dihydroxy- and -dimethoxy-anthracene; influence of light, II, 81.
- Duggan, J. N., two unusual cases of quinine amblyopia, III, 892.
- Duggan, W. F., tangent screen scotometry; value in diagnosis, prognosis, and evaluation of therapy, III, 490.
- Duggar, B. M. See Anderson, T. F., Locke, S. B., and Petering, H. G.
- Duhamet, L., effect of heteroauxin on growth of isolated roots of *Lupinus albus*, III, 365.
- Duke, F. R., and Smith, G. Frederick, rapid qualitative test for alcoholic hydroxyl group; use of nitrate- and perchlorate anions as test reagents, II, 240.
- Duke-Elder, S., Quilliam, J. C., and Davson, H., present position of knowledge of intra-ocular fluid, III, 844.
- Dukes, C. E., cancer of rectum: analysis of 1000 cases, III, 671.
- Dulière, W., and Loewi, O., liberation of potassium by acetylcholine in the central nervous system, III, 21.
- Dulière, W. L., carboxyl and amino-groups of bilirubin, II, 57.
- Dulin, T. G. See Holley, K. T.
- Dull, R. B. See Egloff, G.
- Dulou, R. See Dupont, G.
- Dumanski, A. V., and Fridman, J. D., kinetics of polymerisation and coagulation, I, 411.
- and Granskaja, T. A., solvation of colloids in organic solvents, I, 440.
- Dumazert, C., and Mourgue, M., submicro-determination of phosphate, III, 275.
- and Penet, G., fermentation of very dilute solutions of carbohydrates, III, 350.
- and Poggi, R., colorimetric micro-determination of arginine and of monosubstituted derivatives of guanidine; application to protein hydrolysates, II, 241.
- Dumitrescu-Mante, D., and Giorapeiu, S., thallium poisoning, III, 253.
- Dumke, P. R. See Schmidt, C. F.
- Du Mond, J. W. M., complete isometric consistency chart for e , m , and h , I, 425.
- See also Miller, P. H., jun.
- Du Mont, H. L., and Schmidt, W., crotonaldehyde condensation; reaction of crotonaldehyde with formamide, II, 66.
- Dumont, L. See Dor, M.
- Dumpert, G. See Freudenberg, K.
- Dunaevskaja, C. S. See Pelkis, P. S.
- Dunbar, J. See Chesley, F. F., and Crandall, L. A., jun.
- Duncan, A. B. F., far ultra-violet absorption spectra of aliphatic ketones, I, 344. Focal isolation monochromator for the Schumann region, I, 420.
- Duncan, C. N. See Tigertt, W. D.
- Duncan, C. W., Huffman, C. F., and Tobin, H. A., ketosis in dairy herd, III, 706.
- Lightfoot, C. C., and Huffman, C. F., seasonal variations in level of magnesium in plasma of growing dairy calves, III, 791.
- Duncan, D., effects of anaesthetic mixtures dissolved in oil on motor nerves in cat, III, 334.
- Duncan, D. R. See Cheesman, G. H.
- Duncan, G. G., Tocantins, L., and Cuttle, T. D., application in man of method for continuous reciprocal transfusion of blood, III, 704.
- See also Hayward, G. W.
- Duncan, G. W. See Brooks, B.
- Duncan, M. T. See Russell, W. C.
- Dunetz, A. See Demolon, A.
- Dungern, M. von, and Fundner, H. J., action of increased calcium or potassium concentration in blood on electrocardiogram of healthy subjects, III, 289.
- Dunihue, F. W., and Candon, B. H., histological changes in renal arterioles of hypertensive rabbits, III, 634.
- Dunker, M. F. W., and Starkey, E. B., fluorinated aromatic mercurials, II, 30.
- Dunlap, H. See Hudspeth, E.
- Dunlap, L. H. See Marvel, C. S.
- Dunlop, A. P., and Trimble, F., liquid-vapour equilibria of furan systems; system furfuraldehyde-furfuryl alcohol, I, 360. Determination of furfuraldehyde in furfuraldehyde-furfuryl alcohol solution, II, 112.
- Dunlop, E. C. See Buswell, A. M.
- Dunlop, (Miss) H. G., and Tucker, S. H., attempts to prepare optically active tervalent nitrogen compounds. I. Syntheses of 1:9-phenylene-carbazole and derivatives, II, 54.
- Dunmore, F. W., electric hygrometer, I, 177.
- Dunn, J. S., implications of modern theory of renal excretion, III, 851.
- Dunn, M. S. See Detrick, L. E.
- Dunning, J. R., and Anderson, H. L., high-frequency systems for the cyclotron, I, 375.
- See also Beyer, H. G., Booth, E. T., Carroll, H., Kingdon, K. H., Nier, A. O., and Powers, P. N.
- Dunning, J. W., oxidation of polyhydric alcohols by *Acetobacter suboxydans*, III, 353.
- Dunning, W. F., and Curtis, M. R., malignancy induced by *Cysticercus fasciolaris*: its independence of age of host when infested, III, 45. Host constitution and incidence of chemically induced tumours, III, 588.
- Curtis, M. R., and Wood, F. C., volume of injection and concentration of carcinogenic chemical as factors in initiation of malignant process and their bearing on somatic mutation hypothesis, III, 668.
- Du Nöuy, P. L., recording tensiometer, I, 177. Surface equilibrium of complex solutions, I, 253.
- Dunstall, W. J. See Brammall, A.
- Duntley, S. Q. See Edwards, E. A.
- Dunton, F. G. See Drew, H. D. K.
- Dunworth, J. V., coincidence counting method applied to experiments in nuclear physics, I, 278.
- Dupas, J. See Lespagnol, A.
- Dupont, G., and Dubourg, J., pyroabietic acid, II, 378.

- Dupont, G., Dubourg, J., and Rouris, G., abietic acid, II, 378.
and Dulou, R., pyrolysis of pinene. I. Pyrenenes. II. Formule of pyrenenes, II, 182.
- Duprat, E. See Deulofeu, V.
- Dupré, D. J. See Thompson, H. W.
- Du Pré, F. K., paramagnetic relaxation in iron ammonium alum and chromium potassium alum, I, 103.
- Duquénais, P., and Ellert, M., reineckate and silicotungstate of narcotine; determination of narcotine, II, 146.
- Duran-Reynals, F., action of carcinogenic hydrocarbons on amphibia, III, 140. General permeability-increasing effect of factor from mammalian testicle on blood capillaries, III, 194. Flocculation of tissue extracts by normal and immune sera of fowls and other animals, III, 614.
and Estrada, E., response of skin to re-infection with invasive bacteria, III, 827. See also Stern, K. G.
- Durand, E., quenching and vibrational energy transfer in the fluorescence spectrum of S₂, I, 87.
- Durand, J. F. See Gavaudan, P.
- Durand, R. See Laigret, J.
- Durfee, T., Lerner, M. W., and Kaplan, N., artificial production of seminal ejaculation, III, 733.
- Durfee, W. H., and Kertesz, Z. I., calculation of weight average mol. wts. during the course of decomposition of homogeneous linear polymerides, I, 325.
- Durham, G. S. See Hill, A. E.
- Durkan, T. M. See Gardner, L. U.
- Durphy, J. E. See Keeley, J. L.
- Duryee, A. W. See Fischer, M. M.
- Dusi, H., pure culture free from bacteria and autotrophic nutrition of *Eudorina elegans*; importance of iron in colony formation, III, 612.
- Dusser de Barenne, J. G. See under De Barenne, J. G. D.
- Dustin, A. P., myoblastic myoma, III, 425. and Chodkowski, K., cicatrization studied by colchicine method, III, 180.
- Dustman, R. B. See Weakley, C. E., jun.
- Duszyńska, J., seasonal changes in sensitivity to oestrone, III, 129.
See also Truszkowski, R.
- Dutcher, R. A. See Frederick, C. A., and Knight, C. A.
- Duthie, E. S. See Chain, E.
- Dutt, B. K. See Thakurta, A. G.
- Dutt, N. K. See Ray, P.
- Dutt, S., and Agarwal, B. M. S., colour in relation to chemical constitution of organic salts and metallic derivatives of oximinodiphenylhydantoin, II, 234.
See also Dass, I. N. D.
- Dutta, J. See Chakravarti, D.
- Dutta, N. See Chakravarti, D.
- Dutta, P. C. See Mitter, P. C.
- Dutton, L. O., ionic transmission method for testing with allergens, III, 605.
- Duveen, D. I., and Kenyon, J., *d*- and *l*-α-phenylallyl alcohols and their reactions, II, 14. Attempted partial asymmetric synthesis, II, 185.
- Du Vigneaud, V., Chandler, J. P., Cohn, M., and Brown, G. B., transfer of methyl group from methionine to choline and creatine, III, 753.
- Chandler, J. P., Moyer, A. W., and Keppel, D. M., effect of choline on ability of homocystine to replace methionine in the diet, III, 48.
- Du Vigneaud, V., Cohn, M., Brown, G. B., Irish, O. J., Schoenheimer, R., and Rittenberg, D., study by means of the isotopes of nitrogen and hydrogen of the [*in vivo*] inversion of *d*-α-amino-γ-phenylbutyric acid and the acetylation of *l*-α-amino-γ-phenylbutyric acid, II, 44.
- Melville, D. B., György, P., and Rose, C. S., identity of vitamin-H with biotin, III, 820.
- Miller, G. L., and Rodden, C. J., presence of methionine in insulin, III, 412.
See also Chandler, J. P., György, P., Irving, G. W., jun., and Wood, J. L.
- Dux, K., and Sorzka, S., histophysiological investigations of sex cycle in [female] guinea-pig, III, 651.
- Duyff, J. W., determination of low-frequency impedance of animal tissue, III, 419. Availability of serum-fat, III, 433. Determination of capacitative reactance of animal tissue, III, 447. Determination of low-frequency impedance of animal tissue, III, 530. Circuit diagrams used to represent conductive properties of animal tissue, III, 607.
- Duyn, D. van. See Slooff, A.
- Duyse, van, cataract and diabetes, III, 397.
- Dviniyanova, I. See Volkov, E.
- Dwinnell, L. A., physiological contraction of double hearts in rabbit embryos, III, 97.
- Dworacek, E., action of cholic acid on blood-sugar, III, 188.
- Dworski, M. See Vorwald, A. J.
- Dwyer, C. M. See Loofbrouwer, J. R.
- Dwyer, F., and Earl, J. C., diazoamino-compounds, II, 126.
- Dybing, O., Hansen, K., and Rasch, G., sources of error in Widmark's method for determination of alcohol in blood, III, 13.
and Holzhausen, H. G., binding of digitalis substances to muscle-proteins, III, 523.
- Dyckerhoff, H., and Goossens, N., anticoagulant action of a neodymium preparation, III, 11.
and Loevenich, K., diminution of toxicity of muscle juice by anti-coagulants [heparin], III, 11.
and Voskuhl, H., therapeutic use of anti-coagulants, III, 881.
- Dye, J. A., and Chidsey, J. L., ketone-total carbohydrate utilisation ratios and their relation to problems of ketosis, III, 239.
- Dye, M. See Hawks, J. E.
- Dye, W. B. See McBain, M. E. L.
- Dyer, H. M. See Roe, J. H.
- Dyer, W. J., Wrenshall, C. L., and Smith, G. R., isolation of phytin from soil, III, 548.
- Dyer, W. W. See Bellet, S.
- Dyke, C. G., and Davidoff, L. M., explanation for ribbing seen in walls of dilated cerebral ventricles, III, 113.
- Dykstra, K. G., fermentative activity of yeast zymen, III, 350.
- Dymond, E. G., intensity of mesotrons in the upper atmosphere, I, 54.
- Dyniewicz, J. M. See Steigmann, F.
- Dyson, G. M., and Harrington, T., action of chlorine on arylthiocarbimides and reactions of arylisocyanodichlorides, II, 125.
- Dzevanovski, J. K., geology of the crystalline complex of the eastern margin of the Aldan platform, I, 136.
- Dziobek, L. See Jendrassik, L.
- Dzsinich, A., and Gallé, T., action of histamine, III, 251.

E.

- Eads, J. T., clinical results from continuous intra-gastric drip, using colloidal aluminium hydroxide in treatment of peptic ulcer, III, 499.
- Eagle, H., blood coagulation problem, III, 276. Toxicity, treponemoidal activity, and potential therapeutic utility of substituted phenylarsenoxides. I. Methods of assay, III, 864.
See also Arhesman, C. E., and Doak, G. O.
- Eagles, G. H. See McFarlane, A. S.
- Eakin, R. E. See Snell, E. E., and Williams, R. J.
- Eakin, R. M., regional determination in development of trout, III, 178.
- Eandurand, R., Scull, C. W., and Pemberton, R., reducing substances in plasma of rheumatisants, III, 381.
- Earl, J. C. See Dwyer, F.
- Earle, K. F., sulphapyridine in lymphopathia venereum, III, 245. Sulphanilamide derivatives in treatment of tropical pyomycosis, III, 438. Sulphanilamide in therapy of tropical ulcer, III, 921.
- Earle, W. R., iron-haematoxylin stain containing high concentration of ferrous iron, III, 88.
and Voegtlin, C., action of methylcholanthrone on normal tissue cultures, III, 505.
See also Lillie, R. D.
- Easley, C. A. See Kimmelstiel, P.
- Easom, H. F., Trice, M. F., and Carpenter, C. C., effects of exposure to pyrophyllite dust, III, 257.
- Eastlick, H. L., reciprocal hetero-plantation of limb primordia, III, 178.
- Eaton, I. M., and Haines, S. F., parathyroid insufficiency with cerebral calcification, III, 123.
- Eaton, L. M., negative pressure in epidural space, III, 802.
- Eaton, M. D., and Gronau, A., purification of tetanus and diphtheria toxins, III, 936.
- Eaton, S. V., effects of boron deficiency and excess on plants, III, 943.
- Ebaugh, F. G., epilepsy: physiology and therapy, III, 721.
and Shanahan, W. M., status of chemotherapy in schizophrenic and affective reactions, III, 201.
- Ebbecke, U., and Haubrich, R., viscous behaviour of thread-like and spherical molecules, especially of glycogen and starch in compressed liquids, I, 155.
- Ebeling, R., influence of light on pigment formation in *Penicillium funiculosum*, Thom., III, 166.
- Ebendorf, H. C. See Lattimore, J. L.
- Eber, C. T., simultaneous colour contrast: instrument for demonstrating it, III, 575.
- Ebergényi, A., value of Lehmann-Faciús and Witting cancer reactions, III, 229.
- Eberhart, D. R. See Brode, W. R.
- Eberlein, R. See Kautsky, H.
- Eberly, K. See Brown, W. G.
- Ebert, L., fundamentals and calculation of a new physicochemical method for determination of individual constituents of mixtures, I, 393.
- Ebert, M. H. See Cornbleet, T.

- Ebert, R. H., Sanders, A. G., and Florey, H. W., lymphocytes in chambers in rabbit's ear, III, 839.
- Ebert, R. V., and Stead, E. A., jun., effect of application of tourniquets on haemodynamics of circulation, III, 709.
- Ebina, T., differentiation of acid-fast bacteria by the agglutination process: relation of acid-fast saprophytes to pathogenic tubercle bacilli; *S* and *R* antigens of human and bovine strains, 772.
- Ebright, V. R. See Burrell, R. C.
- Eby, L. T. See Campbell, K. N.
- Eccles, J. C., and O'Connor, W. J., nerve impulses and responses in mammalian striated muscles, III, 108.
- Eck, W. F. van. See Dingemanse, E.
- Eckardt, P., pulmono-coronary reflex during pulmonary embolism, III, 475.
- Eckardt, R. E. See György, P., and Johnson, L. V.
- Eckart, O., thermodynamics of irreversible processes. I. Simple fluid. II. Fluid mixtures, I, 406.
- Eckel, E. E., cover-slip dispenser, III, 786.
- Ecker, A. D., Ayer, W. D., and O'Connor, F. J., increased intracranial pressure from venous obstruction, III, 709.
- and Woltman, H. W., Wernicke's disease: neuro-ophthalmic syndrome of nutritional deficiency, III, 891.
- Ecker, E. E., Kalina, R., and Pillemer, L., apparent inactivation of complement by alloxan, III, 360.
- Kovacs, J., and Pillemer, L., complement in anaphylactic shock, III, 360.
- and Pillemer, L., vitamin-C requirement of guinea-pig, III, 751. Specificity of oxidised and reduced proteins of ocular lens, III, 892.
- Pillemer, L., Jones, C. B., and Seifter, S., separation of complement from fresh guinea-pig serum, III, 792.
- See also Pillemer, L.
- Eckert, J. F. See Richter, C. P.
- Eckert-Möbius, comparative anatomical studies on pneumatization, III, 119.
- Eckey, P., effect of vagus and sympathetic on ventricles in man, III, 14.
- Eckhardt, H. J., action of perbenzoic acid on aromatic hydrocarbons, II, 271. [Nitration of] 3:4-benzpyrene, II, 272.
- Eckler, C. R. See Weigand, C. G.
- Eckstein, H. C. See Singal, S. A., and Tucker, H. F.
- Eckstein, R. W. See Boyer, N. H.
- Eddington, (Sir) A. S., new derivation of the quadratic equation for the masses of the proton and electron, I, 144. Masses of the neutron and mesotron, I, 144. Mass of the universe, I, 280.
- and Thaxton, H. M., interaction potential in scattering of protons by protons, I, 144.
- Eddy, C. R. See Rodebush, W. H.
- Eddy, N. B., and Sumwalt, M., morphine, codeine, and their derivatives. XV. 2:4-Dinitrophenylmorphine, III, 63.
- Eddy, R. D., and Menzies, A. W. C., solubilities of inorganic compounds in ordinary water and in deuterium water, I, 157.
- Eddy, W. H. See Mackie, T. T.
- Edeiken, J., and Griffith, J. Q., jun., cyclic pulmonary oedema at menses in mitral stenosis [relation to pituitary], III, 901.
- Edel, V. See Mouriquand, G.
- Edelmann, A. See Eversole, W. J., Gaunt, R., and Hartman, F. A.
- Eden, A., coprophagy in rabbit: origin of "night" faeces, III, 672.
- and Green, H. W., micro-determination of copper in biological material, III, 946.
- Edens, E., cardiac and coronary insufficiency, III, 475.
- Eder, L. F. See Brown, C. E.
- Edgecombe, A. E., differential distribution of ash in stems of herbaceous plants from base to tip, III, 457.
- Edgerton, R. O. See Bachmann, W. E.
- Edgeworth, F. H. See Brocklehurst, R. J.
- Edgren, G., exophthalmic goitre in a 10-year-old girl, III, 894.
- Edholm, O. G., gravity and blood pressure of cat, III, 385. Heart rate and intracranial pressure, III, 884.
- Edlén, B. See Swings, P.
- Edlund, Y., and Holmgren, H., avertin anaesthesia in hypovitaminoses, III, 925. Anaesthetic action of avertin and evipan at different times of day, III, 925.
- Edman, P. See Jorpes, E.
- Edmister, W. C., specific heat ratios for hydrocarbons, I, 201.
- Edmonds, H. W. See Hertig, A. T.
- Edmonds, S. M., and Birnbaum, N., micro-determination of iron with the silver reductor, I, 174. Solubility of lead iodate in ammonium acetate solution, I, 438.
- See also Birnbaum, N.
- Edmondson, H. A., Glass, S. J., and Soll, S. N., gynaecomastia associated with cirrhosis of liver, III, 215.
- Edridge-Green, F. W., vision and colour vision, III, 803.
- Edsall, J. T., and Mehl, J. W., effect of denaturing agents on myosin. II. Viscosity and double refraction of flow, II, 239.
- and Scheinberg, H., Raman spectra of amino-acids and related compounds. V. Deuterium substitution in the amino-group, I, 346.
- See also Greenstein, J. P.
- Edsall, K. See Drew, C. R.
- Edson, M., and Heard, R. D. H., hydrolysis of conjugated oestrogens in urine of pregnant mares, III, 128.
- Eðström, G., allergy in rheumatic infections, III, 528.
- Edward, D. G. F. See Nabarro, D.
- Edwards, A. B., mineral composition of the Mount Lyell copper ores, Tasmania, and their modes of occurrence, I, 47.
- See also Stillwell, F. L.
- Edwards, E. A., analysis of skin pigment changes after exposure to sunlight, III, 159.
- and Duntley, S. Q., pigments and colour of living human skin, III, 85.
- Edwards, E. G. See Bradbury, F. R.
- Edwards, F. R., and Davie, T. B., use of preserved blood, III, 878.
- Kay, J., and Davie, T. B., dried plasma for transfusion, III, 471.
- Edwards, H. T. See Dill, D. B.
- Edwards, J., effect of unilateral castration on spermatogenesis, III, 811.
- Edwards, J. C., Hoagland, C. L., and Thompson, L. D., type-specific polysaccharide skin test in pneumonia, III, 264.
- Kircher, T. E., jun., and Thompson, L. D., effect of sulphapyridine on immune response to pneumococcal infection, III, 331.
- Edwards, J. C. See also Thompson, L. D., and White, H. L.
- Edwards, J. E. See Mallory, G. K.
- Edwards, J. G., formation of urine, III, 667. Vascular pole of glomerulus in vertebrate kidney, III, 701.
- Edwards, L. B. See Long, P. H.
- Edwards, L. D. See Emery, B. E.
- Edwards, L. F., and Baker, R. C., variations in formation of splanchnic nerves in man, III, 833.
- Edwards, P. R. See Bruner, D. W.
- Eeg-Olofsson, R., plasma-proteins in epileptics, III, 381.
- Egriwe, E., detection of cadmium and magnesium, I, 174.
- Eieikin, A. K., effect of high temperature on vernalised winter wheat, III, 364.
- Efmotschkina, E. See Kizel, A.
- Efinger, I. See Weibke, F.
- Efimov, N. E., classification of magnesian silicates and their alumo-analogues, I, 48.
- Efron, B. G. See Boatner, C. H.
- Eftros, A. M. See Porai-Koschitz, B. A.
- Egbert, H. L. See Trusler, H. M.
- Eger, W., changes in testes of rats with chronic iodine poisoning, III, 647.
- See also Felix, K.
- Egerton, A. C. G. See Stathis, E. C.
- Eggers, H., and Mohr, H., apparatus for measurement of oxidation-reduction potential, I, 40.
- Eggert, J., use of infra-red photography in medicine, III, 696.
- Eggertsen, F. T. See Kolthoff, I. M.
- Eggleston, L. V. See Krebs, H. A.
- Eggleton, M. G., metabolic rate of alcohol, III, 597. Factors affecting alcohol metabolism, III, 597.
- Pappenheimer, J. R., and Winton, F. R., diuretics, osmotic work done, and efficiency of isolated kidney (dog), III, 313. Mechanisms of dilution diuresis in isolated kidney and anaesthetised dog, III, 744.
- Eggleton, W. G. E., zinc and copper content of blood in beriberi, protein deficiency, and diabetes mellitus, III, 472. Zinc and copper contents of organs and tissues of Chinese subjects, III, 745.
- Egle, H. See Arbesman, C. E.
- Egle, K. See Seybold, A.
- Egloff, G., Morrell, J. C., Thomas, C. L., and Bloch, H. S., catalytic cracking of aliphatic hydrocarbons, II, 61.
- Sherman, J., and Dull, R. B., b.p. relationships among aliphatic hydrocarbons, I, 353.
- Egly, R. S. See Comings, E. W.
- Egmond, A. J. van. See Quix, F. H.
- Egorova, V. I., catalytic hydrogenation of alicyclic ketazines. II. Effect of ring-closure on velocity of hydrogenation of ketazines, II, 165.
- Egyed, N. See Dömösi, P.
- Ehmert, A., twelve-hour period of mesotron intensity and height of origin of mesotrons, I, 242. Hard component of cosmic radiation in the stratosphere, I, 308. Decomposition probability of the mesotron, I, 308.
- Ehrenberg, W., protection of thin metal films against oxidation, I, 177.
- Ehrenfest, P. See Auger, P.
- Ehrenhaft, F., photophoresis, electrophotophoresis, and magnetophotophoresis, I, 210. Photophoresis of small particles in a magnetic field, I, 277.

- Ehrenhaft, F., diffusion, Brownian movement, Loschmidt-Avogadro number, and light, I, 320. Physical and astronomical information concerning particles of the order of magnitude of the wave-length of light, I, 425.
- Ehrenstein, M., hormones of sex glands and adrenal cortex, III, 413.
- and Decker, M. T., steroids. III. Partial oxidation of 3:5:6-triols and oxidation with permanganate of 5:6-unsaturated steroids, II, 376.
- and Stevens, T. O., steroids. II. 6(α)-Hydroxypregesterone, II, 282.
- Ehrensward, G., Karschulin, M., and Ehrensward, I., periodic oscillations of the potential of tin in contact with HCl-CrO₃ solutions. II, I, 258.
- Ehrensward, I. See Ehrensward, G.
- Ehrhardt, C. H., and Lark-Horovitz, K., intensity distribution in X-ray and electron diffraction patterns; X-ray atom factors of zinc in zinc oxide and chemical binding, I, 287.
- Ehrhardt, K., and Voller, H. F., prolactin and menstruation, III, 207.
- Ehrhardt, L., pancreatic enzymes in patients with epigastric complaints, III, 811.
- See also Branscheid, F.
- Ehrhardt, U., application of electrometric methods in microchemistry, I, 395.
- Ehrhardt, W., fatal subacute industrial lead poisoning, III, 155.
- Ehrhart, G., Ruschig, H., and Aumüller, W., action of lead tetra-acetate on ketones of the pregnane series. II, II, 96.
- Ehrich, W. E., Lewy, F. H., and Krumbhaar, B. B., toxicity of benzedrine sulphate in various animals, III, 248.
- Ehrismann, O., influence of manganese on body-weight and reproduction, III, 426.
- Toxicity of inhaled aluminium dust, III, 445.
- Ehrlich, J. C., and Lapan, B., the Anitschkow "myocyte," III, 4.
- Ehrlich, W. See Goss, S. W.
- Eichelberger, L., blood pressures in experimental hydronephrosis, III, 101.
- and Bibler, W. G., water and electrolyte content of normal and hydronephrotic kidneys, III, 313.
- Fetcher, E. S., jun., Geiling, E. M. K., and Vos, B. J., jun., muscle- and blood-haemoglobin in dolphin, III, 296.
- Distribution of water and electrolytes in blood of dolphins (*Tursiops truncatus*), III, 473.
- Composition of dolphin milk, III, 668.
- Geiling, E. M. K., and Vos, B. J., jun., distribution of water and electrolytes in skeletal muscle of dolphin (*Tursiops truncatus*), III, 567.
- Leiter, L., and Geiling, E. M. K., water and electrolyte content of dolphin kidney and extraction of pressor substance (renin), III, 910.
- See also Huggins, C.
- Eichhoff, H. J., light-efficiency in carbon dioxide assimilation, III, 616.
- [with Noddack, W.], photochemical investigation of reaction mechanism of carbon dioxide assimilation, III, 616.
- See also Noddack, W.
- Eichna, L. W., and Bordley, J., capillary blood pressure in man; comparison of direct and indirect methods of measurement, III, 101.
- Eidelman, M. M., stability of ascorbic acid in certain acids, III, 53.
- Eidelsberg, J., and Ornstein, E. A., continued use of male sex hormone over long periods, III, 644.
- Eidinow, A., radioactive ointment as a method of surface radium therapy, III, 159.
- Eigenson, S. S., heat effect of partition between two phases, I, 218.
- Eijkman, C. See Sizoo, G. J.
- Eiler, J. J., Stockholm, M., and Althausen, T. L., effect of rate of absorption of glucose on phosphates in intestinal mucosa, III, 755.
- Eilers, H., and Korff, J., significance of phenomenon of electrical charge on stability of hydrophobic dispersions, I, 111.
- Eilert, M. R. See Cook, E. S.
- Einecke, E., electrothermal dispersion of metals, I, 210.
- Einhorn, H. D., electromagnetic induction in water, I, 288.
- Einhorn, M., value of thread test for recognition of peptic ulcer, III, 906.
- Einhorn, M. B., oestrogenic substance in treatment of premature infant, III, 653.
- Eisele, C. W., alkalis and urinary calculi, III, 852.
- See also Hastings, A. B.
- Eisen, M. J., transplantable carcinoma of rat breast, III, 670.
- Eisenberg, H. See Roseman, R.
- Eisenberg, S. See Rysseberghe, P. van.
- Eisenberg-Merling, K. B., living vaccinia virus in corneal cells of rabbit, III, 544.
- Eisenhardt, L., and Thompson, K. W., present status of pituitary basophilism with tabulation of verified cases, III, 206.
- Eisenhuth, F. See Lehmann, E.
- Eisenman, A. J., Ott, L., Smith, P. K., and Winkler, A. W., permeability of human erythrocytes to potassium, sodium, and inorganic phosphate by use of radioactive isotopes, III, 838.
- Eisenstaedt, J. A., Appel, M., and Fraenkel, M., hormones and undescended testis, III, 901.
- Eisenstein, A., and Gingrich, N. S., diffraction of X-rays by liquid argon, I, 404.
- Eisenstein, V. IV. See Margolis, H. M.
- Eitel, W., system CaO-CaF₂-Ca₂SiO₄, I, 217.
- See also Radezewski, O. E.
- Eitner, H., use of deoxycorticosterone in asthenic conditions, III, 497.
- Elagina, N. V., and Zelinski, N. D., contact transformations of benzdicyclo-nonene, II, 10.
- Elam, D. W. See Norris, E. R.
- Elam, J. W., See Bone, J. A.
- Eldahl, A., pneumonia in adults and children treated with 2-sulphonanilamidopyridine, III, 244.
- Pneumonia in adults and children treated with 2-sulphonacetanilamidopyridine, III, 244.
- Elden, C. A., and Nutting, M. D. F., preparation of gonadotrophic hormone from anterior pituitary of sow, III, 404.
- Elder, H. M., diagnosis and treatment of peripheral arterial disease, III, 193.
- Elder, J. H., and Bruhn, J. M., use of Friedman test for pregnancy in chimpanzees, III, 662.
- Elderfield, R. C. See Fried, J., Lewis, E. E., and Pease, D. C.
- Elert, R., adrenal glands and pregnancy, III, 846.
- Eley, D. D., solubility of gases. II. Comparison of organic solvents with water, I, 67.
- Conversion of para-hydrogen by porphyrin compounds, including haemoglobin, I, 225.
- and Rideal, E. K., para-hydrogen conversion on tungsten, I, 443.
- See also Campbell, H.
- Elftman, H., force exerted by ground in walking, III, 296.
- Rotation of the body in walking, III, 296.
- Elgort, M. S., viscosity and m.p. in the system ethylenediamine-methyl alcohol, I, 74.
- Elias, P. G., Hartshorne, N. H., and James, J. E. D., polymorphism. V. Linear rate of transformation of monoclinic into rhombic sulphur, I, 296.
- Eliashkevitch, E. S. See Goldstein, B. I.
- Eliot, (Miss) G. See Galat, A.
- Eliot, C. G. See Cross, L. C.
- Eliot, C. P., vi agglutination test in detection of chronic typhoid carriers, III, 454.
- See also Bangxang, E. na.
- Elizarova, S. S., β -amylase of wheat and barley, III, 609.
- Elkins, H. B., toxic fumes in Massachusetts industries, III, 257.
- See also Bowditch, M.
- Elkins, (Miss) M., and Hunter, L., azo-group as a chelating group. IV. Constitution of arylazobisoximes, II, 251.
- Elks, J., Haworth, J. W., and Hey, D. H., union of aryl nuclei. V. Modification of the Gomberg reaction, II, 338.
- Ellenberg, M. See Boas, E. P., and Pollack, H.
- Ellenberg, S. L., and Martin, A. T., acute nephritis simultaneously affecting 3 siblings, III, 418.
- Eller, J. J., and Wolf, S., permeability and absorbtivity of skin, III, 225.
- Ellert, M. See Duquénnois, P.
- Ellett, A. See Huntoon, R. D., McLean, W. B., and Young, V. J.
- Ellinger, F., action of X-rays on goldfish, III, 69.
- Ellinger, P., urine formation in amphibian and mammalian kidney, III, 419.
- Fluorescence microscopy in biology, III, 702.
- Elliot, L. See Adler, E., and Euler, H. von.
- Elliot, S. See Adler, E.
- Elliott, A., molecular spectrum of iodine excited by fluorescence (in presence of nitrogen) and by active nitrogen, I, 183.
- Elliott, D. F., Kon, G. A. R., and Soper, H. R., sapogenins. VII. Structure of quillaic acid and its relation to echino-cystic acid, II, 257.
- Elliott, E. C., determination of sodium in presence of other metals, I, 372.
- Elliott, F. See Mullin, J. H.
- Elliott, F. J., parathyroid extract and gastric secretions, III, 895.
- Elliott, G. A., and Sugden, S., kinetics of exchange reactions. II. *n*-Propyl, isopropyl, and isobutyl bromides, I, 77.
- Elliott, G. H., and Speakman, J. B., reaction between dibenzyl disulphide and sulphuryl chloride, II, 251.
- See also Burnop, V. C. E.
- Elliott, H., McGill hammer, III, 636.
- Elliott, K. A. C., inhibition of succinoxidase by extracts of tumour and normal tissues, III, 764.
- Elliott, M. A., and Acree, S. F., polar structure of benzoin indicators, I, 148.

- Elliott, M. C., Isaacs, B., and Ivy, A. C., production of prothrombin deficiency and response to vitamins-A, -D, and -K, III, 558.
- Elliott, M. D. See Howe, P. R.
- Elliott, R. See Alexander, H. L.
- Elliott, R. H. E., diagnostic and therapeutic considerations in management of idiopathic thrombocytopenic purpura, III, 789.
- Elliott, R. M., vacuum interferometer for precise measurements, I, 374.
- Elliott, W. S., and Ratcliffe, J. A., Barkhausen-Kurz oscillations with positive ions, I, 236.
- Ellis, C. See Christian, H. S.
- Ellis, D. J. See Dadswell, H. E.
- Ellis, D. M. See Osgood, E. E.
- Ellis, E. L., and Spizizen, J., glycine—an essential factor for growth of bacteriophage, III, 869.
- See also Huffmann, H. M.
- Ellis, F., radiosensitivity of malignant melanomata, III, 912.
- Ellis, F. A., nitritoid reactions due to tryptarsamide, III, 64.
- See also Simpson, C. A.
- Ellis, F. W. See Krantz, J. C., jun.
- Ellis, G. See Voris, L.
- Ellis, G. H. See McCoy, C. M.
- Ellis, H. A. See Clarke, E. de C.
- Ellis, J. W., and Bath, J., near infra-red absorption spectra of pentaerythritol and diketopiperazine obtained with plane polarised light, I, 7.
- Ellis, L. N. See Sherman, H. C.
- Ellis, M., labyrinth, III, 893.
- Ellis, N. R. See Gamble, J. A.
- Ellis, R. W. B., use of irradiated evaporated milk in infant feeding, III, 236.
- Ellis, W. J. See Trikojus, V. M.
- Ellwood, E. C., X-ray study of the constitution of aluminium-zinc alloys of high purity above 275°: new high-temperature X-ray camera, I, 318.
- Elman, R., use of nitroglycerin in immediate treatment of acute non-hemorrhagic pancreatitis, III, 37.
- Serum-albumin regeneration following intravenous amino-acids in hypoproteinemia produced by hemorrhage, III, 471.
- Contributions made in 1939 to knowledge in regard to pancreas, III, 742.
- Elmore, K. L., and Farr, T. D., equilibrium in the system calcium oxide-phosphorus pentoxide-water, I, 257.
- Elo, O., and Otila, E., mechanism of development of early acquired hydrocephalus, III, 891.
- Eloff, G., chronological sex-ratios in *Drosophila*, III, 465.
- Elovitch, S. J., and Katschur, L. A., catalytic oxidation with manganese dioxide. VIII. Kinetics of oxidation of carbon monoxide at low pressures, I, 32.
- and Korndorf, V. A., catalytic oxidation with manganese dioxide. VI. Effect of water vapour on kinetics [of oxidation of carbon monoxide], I, 32.
- El Qorashy, B., blue sclerotics, III, 638.
- El-Sadr, M. M., Hind, H. G., Macrae, T. F., Work, C. E., Lythgoe, B., and Todd, A. R., vitamin-B requirements of rat, III, 50.
- Macrae, T. F., and Work, C. E., determination of riboflavin. I. New biological method, III, 513.
- See also Chick, H.
- Elsdon, S., magnesium and muscle respiration, III, 55.
- Elsen, G., modern quantum mechanics and the benzene problem. IV.—VI., I, 60, 99, 245.
- Elsom, K. A., and Drossner, J. L., effect of atropine and belladonna on motor activity of small intestine and colon, III, 310.
- Glenn, P. M., and Drossner, J. L., effect of pitressin and of benzedrine sulphate on motor activity of small intestine and colon, III, 310.
- Elsom, K. O., Lukens, F. D. W., Montgomery, W. H., and Jonas, L., metabolic disturbances in experimental human vitamin-B₁ deficiency, III, 322.
- Elson, R. G., Smith, H. G., and Wilhelm, J. O., specific heat of manganese from 16° to 22° K., I, 289.
- Elton, N. W., histopathology of defective scar of high Caesarian section and mechanism of subsequent rupture of uterus, III, 906.
- Elvehjem, C. A., nicotinic acid in nutrition, III, 323.
- See also Anderson, H. D., Arnold, A., Axelrod, A. E., Black, S., Frost, D. V., Hove, E., Krewson, C. F., Lipton, M. A., McKibbin, J. M., Mickelsen, O., Nielson, E., Oleson, J. J., Peterson, W. H., Schantz, E. J., Sober, H. A., Waisman, H. A., and Woessner, W. W.
- Elward, J. F., and Belair, J. F., relative degrees of radiosensitivity of tissue, III, 446.
- Elwood, B. J., Piltz, G. F., and Potter, B. J., electrocardiographic observations on pneumoperitoneum, III, 631.
- Ely, J. O., fraction of human urine causing foetus resorption in rats and mice, III, 855.
- and Phillips, R. L., effect of α -oestradiol benzoate on skeletal development of immature rats, III, 903.
- Elze, C., continui; thymus; angulus Ludovici, III, 178.
- Embree, N. D., and Shantz, E. M., cyclisation of vitamin-A₂, III, 321.
- Emde, H. See Jost, H., and Mischeel, F.
- Emel  us, H. J., and Welch, A. J. E., thermal and photochemical oxidation of the chlorinated silanes, I, 79.
- Emeleus, K. G., and Beck, J. W., electrochemistry of gases, I, 417.
- Sloane, R. H., and Cathcart, (Miss) E. B., excitation of green auroral line of oxygen, I, 49.
- Emelianov, S. V., sequence in ontogenetic appearance of vertebral arches in teleosts and omission of chondral stages in their development, III, 178.
- Emerique-Blum, L., and Lvov, A., determination of small quantities of aneurin, III, 593.
- Emerson, B. See Burdick, H. O.
- Emerson, George A., and Van Liere, E. J., drug prophylaxis against lethal effects of severe anoxia. I. Convulsant agents, III, 478.
- Emerson, Gladys A., and Evans, H. M., restoration of fertility in successively older vitamin-E-deficient female rats, III, 431.
- See also Cannon, M. D., Emerson, O. H., Evans, H. M., Mohammad, A., Shimotori, N., and Telford, I. R.
- Emerson, K. See Farr, L. E.
- Emerson, L. See Shepherd, M. L.
- Emerson, O. H., Emerson, Gladys A., and Evans, H. M., vitamin-E activity of α -tocopherylquinone, III, 146.
- and Smith, L. I., vitamin-E. XX. Preparation of α -xyloquinol, II, 80.
- and Smith, L. I. [with Ungnade, H. E.], vitamin-E. XXIV. Structure of γ -tocopherol, II, 313.
- See also Evans, H. M., and Mohammad, A.
- Emerson, P. See Gross, R. E.
- Emerson, Ralph, and Fox, D. L., γ -carotene in the sexual phase of the aquatic fungus *Allomyces*, III, 768.
- Emerson, Robert, and Lewis, C. M., factors influencing efficiency of photosynthesis, III, 459.
- Emerson, W. S., and Davis, J. W., synthesis in the 1:2:3:4-tetrahydroquinoline series, II, 24.
- Dorf, F. B., and Deutschman, A. J., jun., activation of aromatic halogen by ortho-ammonium salt groups, II, 339.
- and Mohrman, H. W., sec.-amines from nitro-compounds, II, 77.
- and Robb, W. D., reductive alkylation of aromatic primary amines. II., II, 11.
- and Uhle, F. C., benzylidene-2:4:6-tribromoaniline, II, 309.
- Emery, B. E., and Edwards, L. D., pharmacology of soaps; irritant action of (II) soaps, (III) sodium alkyl sulphates, on human skin, III, 762.
- Emery, E. S., and Rutherford, R. B., use of aluminium hydroxide gel in treatment of peptic ulcer, III, 36.
- Emery, F. See McCullagh, D. R.
- Emery, F. E., treatment of *Bartonella muris* infections with sulphanilamide, III, 757.
- Bugelski, T. J., and Schwabe, E. L., response of ovaries to gonadotropic extracts in splenectomised rats, III, 403.
- and Greco, P. A., comparative activity of deoxycorticosterone acetate and progesterone in adrenalectomised rats, III, 897.
- See also Griffith, F. R., jun.
- Emge, L. A., and Murphy, K. M., influence of long-continued injections of oestrogen on mammary tissue, III, 213.
- Emile-Weil, P., Aschkenasy, A., and Capron, L., blood-glutathione in polycythemia, leukemia, and erythroblastic anemia, III, 7.
- and Perles, S., case of myeloid leukemia studied by regular spleen, liver, and bone-marrow punctures, III, 628.
- Emmanuilova, Z. I. See Naumov, S. N.
- Emmel, V. M. See Pfeiffer, C. A.
- Emmelin, N., action of narcotics on acetylcholine sensitivity of rectus muscle of frog, III, 522.
- Emmens, C. W., duration of action of natural and synthetic oestrogens when administered orally or by injection, III, 653.
- and Parkes, A. S., effect of route of administration on multiple activities of testosterone and methyltestosterone in different species, III, 582.
- Biological properties of anhydrohydroxyprogesterone (ethinyltestosterone), III, 583.
- Endocrine system and plumage types. II. Effects of thyroxine injections to normal caponised and thyroidectomised caponised birds.
- IV. Feminisation of plumage with special reference to henry cocks and eclipse drakes, III, 805.

- Emmens, O. W. See also Callow, N. H.
- Emmert, E. M., determination of ammonia- and amide-nitrogen in connexion with the chlorate method for nitrogen in plant tissues, III, 548.
- Emmet, R. See Traub, E. F.
- Emmett, A. D., Brown, R. A., and Kamm, O., antihemorrhagic activity of natural and synthetic vitamin-K₁, III, 325.
- Kamm, O., and Sharp, E. A., vitamin-K activity of 4-amino-2-methyl-1-naphthol and 4-amino-3-methyl-1-naphthol, III, 431.
- Peacock, G., and Brown, R. A., chemical determination of thiamin by a modification of the Melnick-Field method, III, 818.
- Emmett, P. H. See Brunauer, S.
- Emmons, C. W., isolation and pathogenicity of *Pityrosporum ovale*, III, 935.
- Emmons, R. C., contribution of differential pressures to magmatic differentiation, I, 136.
- and Gates, R. M., determination of feldspar twins, I, 86.
- Emmrich, R., metabolism of methylated low-molecular dicarboxylic acids, III, 328.
- Emslie, A. G., scattering of slow positive ions at very small angles, I, 336.
- Emte, W. See John, W.
- Enachescu, M., Sâmbotescu, S., and Schwartz, I., effect of histamine on gastric secretion in normal subjects, III, 132.
- Enami, M., post-mortem pigmentary reaction in marine catfish *Plotosus anguilaris*, III, 43. Melanophore-dilating action of adrenaline on Silurian catfish, *Parasilurus asotus*, III, 922.
- Enbom, G., early looping of alimentary canal in the mammalian and human foetus, III, 464.
- Ende, M. van den, precipitins in anti-gonadotropic sera, III, 495.
- See also Rimington, C.
- Ende, S. am., action of adrenaline in adrenal cortex insufficiency, III, 408.
- Enderby, J. See Baker, W.
- Enders, C., and Gergs, K. W., protein of *Pediococcus* of beer, III, 354.
- Enders, J. F., and Hammon, W. D., active and passive immunisation against virus of malignant panleucopenia of cats, III, 508.
- See also Hammon, W. D.
- Endicott, (Miss) M. M. See Hahn, (Miss) D. A.
- Engel, A. von, current distribution and throwing power in electrolytes, I, 363.
- Engel, L. L. See Cook, J. W.
- Engel, M. See Vanyo, M.
- Engel, P. See Velasquez, J.
- Engel, R. W., and Phillips, P. H., fatty livers as a result of thiamin administration in vitamin-B₁ deficiency of the rat and chick, III, 322.
- See also Phillips, P. H.
- Engel, S., and Grüneberg, H., pathology of lungs in a lethal mutation *Rattus norvegicus*, III, 279.
- Engel, W. See Hess, K.
- Engelberg, H. See Freiman, D. G., and Gross, H.
- Engelhardt, A., and Friedrich, H., physical therapy in diseases of stomach, III, 499.
- Engelhardt, H. T. See Sodeman, W. A.
- Engle, E. T., and Crafts, R. C., uterine effects from single treatments of stilboestrol and ethinylœstradiol in monkeys, III, 213.
- and Stout, A. P., spontaneous primary carcinoma of prostate in a monkey (*Macaca mulatta*), III, 854.
- See also Buxton, C. L.
- Engle, H. B., and McMurtrey, J. E., jun., effect of algae in relation to aëration, light, and sources of phosphorus on growth of tobacco in solution cultures, III, 775.
- Engler, K. See Freudenberg, K.
- Englis, D. T. See Keirs, R. J.
- English, B. C., Shmukler, B. C., and Cowan, A., evaluation of three methods commonly used in examination of eyes of school children, III, 204.
- English, J., jun., Bonner, J., and Haagen-Smit, A. J., wound hormones of plants. IV. Structure and synthesis of a traumatin, III, 271.
- Mead, J. F., and Niemann, C., synthesis of 3:5-difluoro- and 5-iodo-3-fluoro-dl-tyrosine, II, 172.
- See also Donleavy, J. J.
- English, J. P. See Roblin, R. O., jun.
- Engman, M. F., and MacCardle, R. C., histochemical study of neurodermatitis: micro-incineration and spectrographic analysis, III, 797.
- Engs, W. See Burgin, J.
- Engstrom, R. W., and Huxford, W. S., time-lag analysis of the Townsend discharge in argon with activated caesium electrodes, I, 336.
- Engvall, G. See Farris, E. J.
- Enkvist, T. [with Laasonen, L.], mercury compounds as catalysts of the synthesis of aspartic acid from fumaric acid and ammonia, II, 70.
- [with Merikoski, H., and Tikkanen, P.], organic catalysts for removal of carbon monoxide from formamide. II. Catalysts with alcoholic hydroxyl as active group, II, 71.
- Ennor, A. H., effect of anterior pituitary extracts on detoxication mechanisms of the dog, III, 899.
- Enns, T., radioactivities produced by proton bombardment of palladium, I, 4.
- Ensleme, J. See Piery, M.
- Ensor, O. See Haldi, J.
- Ensworth, H. K. See Plummer, N.
- Entenman, C., Chaikoff, I. L., and Montgomery, M. L., blood-lipins of dogs with ligation of external pancreatic ducts, III, 133. Effect of choline on blood- and liver-lipins of the dog with ligated pancreatic ducts, III, 821.
- Changns, G. W., Gibbs, G. E., and Chaikoff, I. L., response of lipin metabolism to alterations in nutritional state. I. Effects of fasting and chronic undernutrition on post-absorptive level of blood-lipins, III, 748.
- Lorenz, F. W., and Chaikoff, I. L., lipin content of blood, liver, and yolk sac of newly hatched chick and changes occurring in these tissues during the first month of life, III, 649. Effects of crystalline sex hormones on blood-lipins of bird, III, 810.
- See also Montgomery, M. L.
- Entin, I. B., connexion between ascorbic acid and tissue lipase, III, 53.
- Epelbaum, S. E. See Chaikina, B. I.
- Epifanio, G., atomic and nuclear physics in biology and therapy; neutrons and β -radioactive substances, III, 446.
- Epprecht, A. See Karrer, P.
- Eppright, (Miss) M. A. See Henze, H. R.
- Epps, van. See under Van Epps.
- Eppson, H. F. See Beath, O. A.
- Epstein, B. S., and Gerber, A., severe manifestations of both wet and dry form of beriberi in same patient, III, 428.
- Epstein, E., bullous eruption following sulphanilamide therapy, III, 331. Effect of bismuth therapy on latent plumbism, III, 336. Eruptions and photosensitivity due to dyed fabrics, III, 684.
- See also Greenthal, R. M.
- Epstein, N. N. See Falconer, E. H., and Rosenberg, E. E.
- Epstein, S. See Sigler, L. H.
- Epstein, S. F. See Ferdman, D. L.
- Epstein, S. S., and Snell, F. D., gentian-violet in Sabouraud's medium for isolation of pathogenic fungi, III, 933.
- Epstein, V. V., metamorphosis of salt lakes, I, 332.
- Erali, K. See Lapp, C.
- Erb, T., and Klumb, H., long-wave infrared radiation, I, 194.
- Erben, S., labyrinth does not control equilibrium in man, III, 206.
- Erbring, H., stability relations in organosols of macromolecular compounds, I, 255.
- Erdey-Gruz, T., and Bajor, (Fr.) O., electrocapillary curve of very dilute amalgams, I, 22.
- Erdmann, G., intravital desquamation of epithelial cells of thyroid gland, III, 407.
- Erf, L. A., disappearance of intravenously injected lymphocytes in absence of gastro-intestinal tract, III, 704.
- and Macleod, C. M., increased urobilinogen excretion and acute hemolytic anemia in patients treated with sulphapyridine, III, 678.
- and Rhoads, C. P., hematological effects of benzene poisoning, III, 68. Glycine tolerance test in sprue and pernicious anemia, III, 472.
- Erfting, H. D. See Grüneisen, E.
- Erhart, H., alteration of miocene basalts in the Cantal, and nature of derived soils, I, 334.
- Erichsen, H. See Leusden, F. P.
- Erickson, A. A. See Sawyer, R. A.
- Erickson, B. N., Avrin, I., Teague, D. M., and Williams, H. H., micro-methods for determination of sphingomyelin and choline; phospholipin partition in blood and tissues, III, 946.
- See also Ferguson, J. H.
- Erickson, C. W. See Comfort, M. W.
- Erickson, T. C., spread of epileptic discharge; experimental study of after-discharge induced by electrical stimulation of cerebral cortex, III, 720.
- Eriksson, E. J. See Gard, S.
- Eriksson-Quensel, I. B. See Tiselius, A.
- Eristavi, D. I., and Barnabichvili, D. N., effect of ultra-high-frequency electrical fields on hydrophobic sols, I, 212. Ferrocyanides of manganese, zinc, and lead, I, 233.
- and Zvjagintzev, O. E., action of ultra-short waves on complex compounds, I, 263.
- Erk, S., the task and importance of rheology, I, 115.
- Erlanger, J., the synapse; initiation of impulses in axons, III, 21.
- and Blair, E. A., facilitation and diffucilation effected by nerve impulses in peripheral fibres, III, 568.

- Erlanger, J. See also Blair, E. A.
- Erlenmeyer, H., and Bitterlin, O., deuterium compounds; optically active sodium ammonium dideuterotartrate, II, 118.
- and Dahn, H., chromatographic methods in inorganic chemistry, I, 79.
- and Ueberwasser, H., structural chemistry. I. The Ni⁺⁺ specific group, II, 143. Preparation of 2':3'-pyridino-3:4-benzthiazole (quinthiazole), II, 196.
- Ermakov, H. V., thermoconductivity of skin in invertebrates, III, 139.
- Ermakova, K., Ermolova, A., and Neumann, M., cool and hot flame of methyl ether, I, 221.
- Ermolova, A. See Ermakova, K.
- Ernst, C., electrocardiographic diagnosis of auricular changes in man by chest leads, III, 792. Determination of blood gases by Haldane's method, III, 794.
- Errera, J., Gaspart, R., and Sack, H., infrared OH band and association, I, 94.
- See also Brüll, L.
- Erschov, A. P., and Joffe, J. S., reaction of diazo-compounds with primary amines containing salt-forming groups. I. Tautomeric triazens. II. General mechanism of the reaction, II, 166.
- Erskine, J., and Royds, J. E., sulphapyridine in acute pemphigus, III, 244.
- Erspamer, V., chromaffin system of viscera and its relation to insular system, III, 4.
- Pharmacological determination of cardio-kinetic substances in avitaminotic and hypervitaminotic pigeons, III, 62.
- Relationship between acetylcholine and vitamin-B₁, III, 428.
- Acetylcholine and vitamin-B₁, III, 428, 512.
- Ervin, G., jun. See Roller, P. S.
- Ervin, R. F., test-tube rack, I, 177.
- Erwin, G. S., Wright, R., and Doherty, C. J., hypovitaminosis-C and pulmonary tuberculosis, III, 751.
- Erxleben, H. See Kögl, F.
- Esafov, V. I., anomalies in the $\alpha\beta$ -unsaturated aldehyde and ketone series, II, 154.
- Esat, I., accessory for Neubauer's ammonia distillation apparatus for Kjeldahl nitrogen determination, I, 177.
- Escamilla, R. F., and Lissner, H., induction of menarche and secondary sexual characteristics in woman of 34 by oestradiol dipropionate, III, 735.
- Esch, U. See Schneider, Armin.
- Escher-Desrivieres, J., and Godron, Y., absorption variations of a selenium-tinted glass as a function of temperature, I, 281.
- Eschevskaja, M. P., kinetics and mechanism of decomposition of hydrocarbons. VII. Disturbing effect of unsaturated hydrocarbons on decomposition of paraffin hydrocarbons, I, 221.
- Escobar, L. G. See Del Campo, A.
- Escourrou, R., and Sauary, P., selective hydrogenation under reduced pressure of olive oil and its fatty acids, II, 152.
- Escribano, A. See Moles, E.
- Escudero, L., and Adams, W. E., experimental methods of lung collapse, III, 387.
- Espenan, J. K. See Beard, H. H.
- Espinasse, P. G., oestrogen depot formation, III, 652.
- Esselen, W. B., jun., and Fellers, C. R., nutritive value of dried tomato pomace, III, 51.
- Esselen, W. R. See Mindell, A.
- Essen, K. W., and Cappell, K. H., dermatographism in patients with disturbances of autonomic nervous system, III, 199.
- and Janzik, K., blood pressure changes produced by heat and cold, III, 193.
- and Rogge, K., effect of drugs on galvanic skin reflex, III, 570.
- Essenberg, J. M., and Karrasch, R. J., effects of Roentgen rays on gonads of sexually mature domestic fowl, III, 809.
- Esser, C., dose distribution in tangential irradiation, III, 447.
- Essex, H. See Kolumban, A. D.
- Essex, H. E. See Hester, H. R., and Wakim, K. G.
- Essin, O., and Loschkarev, M., polarisation during recharging of tin ions, I, 28.
- Loschkarev, M., Levitina, Z., and Rusanova, K., polarisation in deposition of bismuth at the cathode, I, 295.
- Estermann, L., Simpson, O. C., and Stern, O., free fall of molecules, I, 386.
- Estrada, E. See Duran-Reynals, E.
- Etchevé, J. C., effect of quinidine on auricular fibrillation, III, 62.
- See also Chamorro, T.
- Etkin, W., developmental relationship between pars intermedia of pituitary and brain in tadpoles, III, 848.
- Ettelson, L. N., inability of deoxycorticosterone acetate to protect adrenal-ectomised rats against typhoid vaccine, III, 846.
- Eucken, A., and Güttner, W., thermal hysteresis at the transition of hydrogen bromide at 89° K., I, 435.
- and Hunsmann, W., calorimetric investigations of the physical and activated adsorption of hydrogen on nickel, I, 21.
- and Schröder, E., thermal conductivity of solidified liquids and gases (benzene, hydrogen bromide, and nitrous oxide), I, 202.
- Eudin, J. See Luck, J. M.
- Eugster, J., biological action of cosmic rays, III, 258.
- Euler, B. von, Euler, H. von, and Malmberg, M., influence of fats on calcium metabolism. II, III, 59.
- Euler, H. von, Malmberg, M., and Lundberg, B., influence of fats on calcium metabolism. I, III, 59.
- Euler, H., observation of showers and nuclear transmutation with cosmic rays in an ionisation chamber, I, 400.
- Euler, H. von, enzymic phosphorylation and dehydrogenation in brain, nerves, and sarcomata, III, 424.
- and Adler, E., steric specificity of glutamic acid dehydrogenase, III, 161.
- Adler, E., and Friedmann, D., formation of phenol-formaldehyde resins. I. Condensation of guaiacol and formaldehyde, II, 216.
- Adler, E., Günther, G., and Elliot, L., isocitric acid dehydrogenase and glutamic acid synthesis in higher plants and yeasts, III, 70.
- Adler, E., and Plass, M., isocitric acid dehydrogenase, III, 70.
- and Bauer, E., phosphorylating degradation of polysaccharides in muscle and sarcoma, III, 348.
- and Hellström, H., respiratory enzyme systems, III, 70.
- Hellström, H., and Forsman, N., enzyme studies. II, III, 70.
- Hellström, H., and Günther, G., enzymic studies on sarcoma, III, 424.
- Euler, H. von, and Högborg, B., concentration of pyruvic acid in normal and avitaminotic blood, III, 187.
- Vitamin-B₁, insulin, and phosphate metabolism, III, 518.
- Pyruvic acid metabolism, III, 860.
- and Malmberg, M., growth of young rats and formation of vital-staining erythrocytes, III, 320.
- Malmberg, M., and Schlenk, F., vitamin-B factors, III, 50.
- and Schlenk, F., nicotinamide and cozymase in blood, III, 233.
- Schlenk, F., Günther, G., Forsman, N., and Högborg, B., enzyme and co-enzyme of carbohydrate decomposition in Jensen sarcoma, III, 590.
- See also Adler, E., Ahlström, L., Das, N. B., Euler, B. von, Schlenk, F., and Skarzynski, B.
- Euler, U. S. von, Liljestrand, G., and Zotterman, Y., excitation mechanism of chemoreceptors of carotid body, III, 387.
- Eusterman, G. B., gastro-intestinal hæmorrhage from otherwise symptom-less lesions, III, 812.
- Euw, J. von. See Reichstein, T.
- Evangelinos, P., and Wohlfeil, T., bacterial autolysis and its importance in bacterial vaccines, III, 355.
- Evans, A. C., and Verder, E., hæmolytic streptococci. V. Characteristics of human and animal strains of groups A and C, III, 936.
- Evans, C. A. See Green, R. G.
- Evans, C. H., intensity-scale monochromatic sensitometer, I, 374.
- See also Webb, J. H.
- Evans, D. G., production of pertussis antitoxin in rabbits and the neutralisation of pertussis, parapertussis, and bronchiseptica toxins, III, 771.
- See also Bruckner, I. E., and Oddy, J. G.
- Evans, D. P., and Jenkins, H. O., relation between activation energies of reactions in solution and dielectric constants of the media; measurement of activation energies in solution, I, 363.
- See also Coombs, (Miss) E., and Davies, G.
- Evans, E. A., jun., Vennesland, B., and Schneider, J. J., effect of spermine on tissue oxidations, III, 56.
- See also Krebs, H. A.
- Evans, E. M., Rydon, H. N., and Briscoe, H. V. A., isotopic exchange reactions between deuterium oxide and *cis*- and *trans*-glutaconic acids, II, 5.
- Evans, F. R. See Curran, H. R.
- Evans, G., factors affecting oxygen consumption of several species of plethodontid salamanders in aerial and aquatic media, III, 388.
- Evans, G. R. See Williams, E. J.
- Evans, H. C. See Maxted, E. B.
- Evans, H. M., seasonal changes in pituitary of eel, III, 729.
- and Emerson, Gladys A., failure of wheat-germ oil extracts to produce abdominal neoplasms in rats, III, 44.
- Prevention of nutritional muscular dystrophy in suckling vitamin-E-low rats with α -tocopherol and related substances, III, 843.
- Emerson, Gladys A., and Emerson, O. H., preservation of seminiferous epithelium and fertility in male rats on vitamin-E-low rations supplemented by α -tocopherol, III, 648.

- Evans, H. M., Emerson, O. H., Emerson, Gladys A., Smith, L. J., Ungnade, H. E., Prichard, W. W., Austin, F. L., Hoehn, H. H., Opie, J. W., and Wawzonek, S., vitamin-E. XII. Specificity and relationship between chemical structure and vitamin-E activity, III, 54.
- and Simpson, M. E., experimental superfecundity with pituitary gonadotrophins, III, 900.
- Simpson, M. E., Tolksdorf, S., and Jensen, Hans, gonadotropic principles in sheep pituitary substance, III, 120.
- See also Emerson, Gladys A., Emerson, O. H., Fraenkel-Conrat, H. L., Fraenkel-Conrat, J., Li, C. H., Meamber, D. L., Mohammad, A., Shimotori, N., and Telford, I. R.
- Evans, J., examination of coloured alkali halides for photo-electric Hall effect, I, 102.
- Evans, J. A., and Shulman, H., danger of forcing fluids in malnutrition, III, 318.
- Evans, J. P. See Aring, C. D.
- Evans, J. S., Hines, L. R., Ceithaml, J. J., and Koch, F. C., comparative augmentation of gonadotropic substances in rat, mouse, and chick, III, 731.
- Hines, L., Varney, R., and Koch, F. C., comparative assay of gonadotropic substances on rats, mice, and chicks, III, 731.
- Evans, L. T., and Clapp, M., effects of ovarian hormones and seasons on *Anolis carolinensis*, III, 736.
- and Hegre, E., effect of seasons and pituitary extracts on thyroid of turtle, III, 731.
- Evans, M. G., and Madinaveitia, J., diffusing factors. IV. Mode of action, III, 534.
- Evans, P. J., underlying causes of glaucoma, III, 115.
- Evans, R. A. See Robertson, G. R.
- Evans, R. C., electromagnetic separator for mineral powders, I, 83. Mesomerism, I, 347.
- Mann, F. G., Peiser, H. S., and Purdie, D., constitution of complex metallic salts. XI. Structure of the tertiary phosphine and arsine derivatives of cadmium and mercuric halides, II, 366.
- Evans, R. D., and Goodman, C., determination of thoron content of air and its bearing on lung cancer hazards in industry, III, 445. Radioactive air inhalation as health hazard, III, 824.
- See also Curtiss, L. F., Goodman, C., Hertz, S., and Schumb, W. C.
- Evans, R. J., and Phillips, P. H., comparative toxicity of cryolite fluorine and sodium fluoride for rat, III, 157. New low-fluorine diet: effect on rats, III, 319.
- Evans, R. L. See Arnold, R. T.
- Evans, S. T. See Riceman, D. S.
- Evans, W., and Longhuan, O., drug treatment of hyperpiesia, III, 293.
- Evans, W. E., jun., alcoholate of trimeride of hydroxypyruvaldehyde as antidote to mercuric chloride poisoning, III, 760.
- See also Krantz, J. C., jun.
- Evans, W. H., vitamins in ophthalmology and otolaryngology, III, 26.
- Evans, W. L. See Klingensmith, C. W., Nichols, S. H., jun., and Reynolds, D. D.
- Evans, W. V., Braithwaite, D., and Field, E., electrolysis of higher aliphatic organomagnesium halides in diethyl ether, II, 158.
- Eveleth, D. F. See Eveleth, M. W.
- Eveleth, M. W., Eveleth, D. F., and Walsh, F. E., hypermagnesemia without clinical symptoms in dairy cattle, III, 791.
- Evelyn, K. A. See Smith, E.
- Evenden, J. See Chambers, W. H.
- Everett, D. H., and Coulson, C. A., calculation of ionic heat capacities in solution, I, 295.
- and Wynne-Jones, W. F. K., thermodynamics of acid-base equilibria, I, 73.
- Everett, J. E. See Bost, R. W.
- Everett, J. L., and Hewett, C. L., polycyclic aromatic hydrocarbons. XXV. 1- and 2-Alkyl derivatives of 3:4-benzphenanthrene, II, 370.
- Everett, J. W., restoration of ovulatory cycles and corpus luteum formation in persistently oestrous rats by progesterone, III, 904.
- Everett, M. R. See Crews, L. T.
- Everitt, E. L., and Sullivan, M. X., fungistatic and fungicidal action of organic sulphur compounds, III, 610.
- Eversole, W. G. See Makens, R. F.
- Eversole, W. J., Edelmann, A., and Gaunt, R., effect of adrenal cortical transplants on life-maintenance and "water intoxication," III, 727.
- Ewald, P. P., X-ray diffraction by finite and imperfect crystal lattices, I, 245.
- Ewell, R. H., calculation of chemical equilibrium at high pressures, I, 162. Thermodynamic properties of paraffins and olefines, I, 324.
- and Bourland, J. F., thermodynamic properties of methyl cyanide and methyl isocyanide, I, 406.
- See also Lecky, H. S.
- Ewen, E. S., and Spring, F. S., triterpene resinols and related acids. IX. Oxidation of α -amyradienyl acetate, II, 351.
- Ewer, R. F., and Fox, H. M., function of chlorocruorin, III, 795.
- Ewing, A. W. G. See Dickson, E. D. D.
- Ewing, D. H. See Plesset, M. S., and Weisskopf, V. F.
- Ewing, D. T., Vandenberg, J. M., and Kamm, O., ultra-violet absorption of vitamin-K₁, -K₂, and related compounds, III, 146.
- See also Dakin, T. W.
- Ewing, M. E. See Blatherwick, N. R.
- Ewing, W. W., and Glick, C. F., 20° isotherm of the ternary system: manganous nitrate-nitric acid-water, I, 413.
- Exton, W. G., and Rose, A. R., one-hour renal condition test, III, 502.
- Eyerly, J. B., and Breuhaus, H. C., measuring acidity and protein digestion within human stomach, III, 218.
- Eymer, H., adaptation during pregnancy and parturition, III, 307.
- Eyring, H., Glasstone, S., and Laidler, K. J., application of theory of absolute reaction rates to overvoltage, I, 75.
- See also Frisch, D., and Ri, Taikei.
- Eyster, E. H., rotational structure of hydrazoic acid bands in photographic infra-red, I, 193.
- and Gillette, R. H., vibration spectra of azoimide, methyl azide, and methyl isocyanate; thermodynamic functions of azoimide, I, 282.
- Eyster, E. H. See also Gillette, R. H.
- Eyster, J. A. E. See Goldberg, H.
- Ezoe, H. See Nishina, Y.
- F.
- Faber, H. K., and Davis, J. H., gastric peristalsis after pylorotomy, III, 583.
- See also Gray, H., and Tiffin, M. E.
- Faber, O. M., detection and measurement of size of ultra-microscopic quartz particles in lung tissue, III, 445.
- Fabergé, A. C., chromosome fragmentation in *Tradescantia* by X-rays, III, 373. Equivalent effect of X-rays of different wave-length on chromosomes of *Tradescantia*, III, 836.
- Fabian, F. W. See Nunheimer, T. D.
- Fabian, G., and Lorentz, W., salivary and gastric secretion in Graves' disease, III, 303.
- Fabre, P., stimulation produced by alternating impulses of high frequency and short duration, III, 109. Effect of electrotonus on intermittent stimulation, III, 196. Nerve model. I. and II., III, 636.
- Fabre, R., and Cismaru, A., identification of therapeutic and toxic substances in urine, III, 503.
- Fabrikant, V., distribution of electrons over the section of a gas discharge, I, 139. Probability of excitation of a potassium atom, I, 183. Excitation of atoms in a gas discharge, I, 241.
- Fabrykant, M., and Wiener, H. J., effect of added carbohydrate on stabilised insulin-treated diabetics, III, 860.
- Facer, J. F. See Christensen, B. E.
- Fader, D. E. See Hall, W. K.
- Fahay, J. J., muscular and skeletal changes in arachnodactyly, III, 698.
- Fahim, H. A. See Schönberg, A.
- Fahr, T., malignant hypertension, III, 634.
- Failla, G., X-ray generator especially designed for biological experiments, III, 763.
- Faingold, M. A. See Hertzriken, S. D.
- Fair, W. R., and Wolfe, J. M., staining method for anterior hypophysis of the rat, III, 88.
- Fairbanks, H. V. See Thompson, M. de K.
- Fairbrother, F., chemical action of γ -radiation from ⁸⁰Br, I, 227.
- Fairbrother, R. W., coagulase production as criterion for classification of the staphylococci, III, 265.
- Fairburn, H. W., hypotheses of quartz orientation in tectonites, I, 182.
- Fairchild, R. D., cytologic studies of sarcomas of bone, III, 855.
- Fairhall, L. T., and Sayers, R. R., significance of excretion of lead in urine, III, 252. Relative toxicity of lead and its compounds, III, 927.
- Fairley, N. H., methæmalbumin in man (ψ -methæmoglobin), III, 389. Anæhæmin in tropical macrocytic anæmia, III, 787. Spontaneous disintegration of blood pigments, with special reference to methæmalbumin formation, III, 840.
- Faivre, R., formation of solid solutions by insertion during dissociation of silver oxide, I, 205.
- Fajans, K., and Sullivan, W. H., induced radioactivity of rhenium and tungsten, I, 384.
- and Voigt, A. F., radioactivity produced by bombarding thallium, I, 384.

- Fakhoury, N., and Wahba, M., swelling of wood charcoal; experiments with a new silica extensometer, I, 355.
- Falconer, E. H., and Epstein, N. N., purpura following neoarsphenamine, III, 760.
- Epstein, N. N., and Mills, E. S., purpura hæmorrhagica due to arsphenamines. Sensitivity in patients as influenced by vitamin-C therapy, III, 927.
- and Schumacher, I. C., purpura hæmorrhagica from sedormid, III, 441.
- Falconer, R., Gulland, J. M., and Story, L. F., constitution of purine nucleosides. IX. Crotonoside, II, 27.
- Falconer, M. A. See Russell, D. S.
- Fales, H. A., and Shapiro, C. S., thermodynamic properties of substances. III. Vapour volumes as functions of reduced temperature alone, I, 202.
- Falin, L. I., experimental teratoma testis in fowl, III, 505.
- Falkenberg, W. See Bodenstein, M.
- Falkenburger, F., new craniological classification of ancient inhabitants of Canary Islands, III, 373.
- Falkenstein, D. F., and Jackson, R. L.; acacia therapy in child with nephrosis, III, 813.
- Fallon, L. D. See Harned, H. S.
- Falta, W., and Pilgerstorfer, E., food rationing and diabetes mellitus, III, 518.
- Famiani, V. See Amantea, G.
- Fan, C. H. See Shohl, A. T.
- Fanburg, S. J., exfoliative dermatitis due to naphthalene, III, 864. Dermatitis due to aquaphor, III, 929.
- Fancoini, G., chemical considerations in toxic conditions, III, 95. Primary hæmolytic anæmias, III, 878.
- Fano, U., cathode luminescence, I, 430.
- Fantl, E. See Necheles, H.
- Fantl, P., determinations of sulphanilamide and other primary aromatic amines in body-fluids, III, 919.
- Fantus, B., Kopstein, G., and Schmidt, H. R., effect of bran on intestinal motility, III, 415.
- Trant, E. F., and Greenebaum, R. S., therapy of subvitaminosis-B₁, III, 914. See also Steigmann, F.
- Farah, A., and Pinkston, J. O., responses of intestinal smooth muscle of the dog to benzedrine sulphate, III, 333.
- Farber, J. E., Simmonds' disease, III, 730.
- Farber, S., neuropathic pulmonary oedema, III, 795.
- See also Harris, J. S., and Shohl, A. T.
- Farbman, A. A., Sandweiss, D. J., and Saltzstein, H. C., effect of pregnancy and antuitrin-S on cinchophen ulcers in dogs, III, 310.
- See also Friedman, M. H. F., Saltzstein, H. C., and Sandweiss, D. J.
- Fardon, J. C., Sullivan, W. A., and Andrus, M. B., growth-promoting substances liberated by traumatised tissues *in vitro*, III, 623.
- Sullivan, W. A., Brotzge, G. C., Loeffler, M. K., and Andrus, M. B., changes in respiration [of skin slices] following irradiation [of skin *in situ*] with X-rays, III, 529.
- Farinaud, M. E., distribution of blood groups in south Indo-China: Darlaes and Chams, III, 187. Blood groups of Banhars, Djarais, and Sedangs, primitive populations in south Indo-China, III, 187. Blood groups in tribes of South Annam, III, 559.
- Farinholt, L. H., Stuart, A. P., and Twiss, D., halogenation of salicylic acid, II, 277.
- Faris, B. F. See Small, L.
- Farkas, A., catalytic exchange of hydrogen atoms between molecular deuterium and propane and butane, I, 261.
- and Farkas, L., catalytic interaction of acetylene and hydrogen on platinum, I, 122. Thermometer for low temperatures, I, 374.
- Farkas, L., Hirschberg, Y., and Sandler, L., photochemical decomposition of solid hydrogen compounds at low temperatures, I, 123.
- and Sandler, L., heterogeneous orthopara conversion on paramagnetic crystals, I, 223.
- See also Bergmann, E., and Farkas, A.
- Farmer, C. J., Abt, A. F., and Aron, H. C. S., influence of arsenicals, bismuth, and iron on plasma-ascorbic acid level, III, 927.
- Abt, A. F., and Chinn, H., absorption of vitamin-C from intestinal tract in health and disease, III, 674.
- See also Abt, A. F., and Chinn, H.
- Farmer, E. H., and Martin, J. F., mechanism of polymerisation. IV. Experiments relating to constitution of solid dimeride and liquid trimeride of β -dimethylbutadiene, and to separation of higher polymerides, II, 335.
- See also Ahmad, A.
- Farnsworth, H. E., and Winch, R. P., work functions of different faces of silver single crystals, I, 50. Producing gas-free surfaces, I, 395.
- Farquharson, J., and Sastri, M. V. C., polymerisation of anthracene to di-anthracene from magnetic standpoint, I, 245.
- Farr, C. C. See Banwell, C. J.
- Farr, J. T. See Paterson, J. C.
- Farr, L. E., assimilation of protein by young children with the nephrotic syndrome. II. Effect of dietary fat and carbohydrate on nitrogen balance. III. Effect of nephrotic crises on assimilation of nitrogen, III, 418. Intravenous administration of casein hydrolysate to nephrotic children and its effect on nitrogen balance and plasma-amino-acid level, III, 813.
- and MacFadyen, D. A., amino-acid nitrogen in urine of children with nephrotic syndrome following intravenous amino-acids, III, 313. Hypo-amino-acidæmia in children with nephrotic crises, III, 813.
- MacLeod, C. M., Fletcher, P. H., Emerson, K., Mirick, G. S., and Curnen, E. C., hypoamino-acidæmia in pneumococcal pneumonia, III, 707.
- and Smadel, J. E., effect of dietary protein on course of nephrotic nephritis in rats, III, 223.
- Farr, T. D. See Elmore, K. L.
- Farr, W. K., structure and composition of plant cell membranes, III, 832.
- Farrar, G. E., Burnet, W. E., and Steigman, A. J., hæmolytic anæmia and hepatic degeneration cured by splenectomy, III, 788.
- Farrar, J. L. See Grace, N. H.
- Farrekk, L. N., and Kitching, J. S., passive protection of mice with immune horse serum against staphylococci, III, 688.
- Farrell, E. See Greene, C. H.
- Farrell, L. N., combined action of sulphapyridine and serum in experimental staphylococcus infection in mice, III, 521.
- Farris, E. J., and Engvall, G., turntable for exercising rats, III, 84.
- Fasciolo, J. C. See Braun-Menéndez, E., Houssay, B. A., and Muñoz, J. M.
- Fassett, D. W. See Hjort, A. M.
- Fast, J. D. See De Boer, J. H.
- Fastovski, V. G., adsorptional method of separating krypton and xenon. I, I, 231.
- and Gurvitsch, J. G., liquid-vapour equilibrium in the system oxygen-krypton, I, 215.
- See also Gönikberg, M. G.
- Fataliev, C. M., effect of a weak magnetic field on plasma, I, 2.
- Fatzner, A. S. See Todhunter, E. N.
- Fauley, G. B., Ivy, A. C., and Terry, L., attempt to prevent post-operative jejunal ulcer by aluminium hydroxide therapy; experimental study in Mann-Williamson dogs, III, 133.
- Faulkner, J. M. See Peters, C. M.
- Faure, M. See under Faure-Beaulieu, M.
- Faure-Beaulieu, M., Cahen, R., and Feld, M., anæmia of old women, III, 7.
- See also Macheboeuf, M.
- Faust, F. B. See Robertson, H. F.
- Faust, G. T., polarising comparison-microscope, for use in petrographic measurements, I, 330.
- Faust, P. H. See Billheimer, J. S.
- Fautrez, J., athrocytosis: vital staining by acid dyes, III, 281.
- Fauvety, J. C. See Del Castillo, E. B.
- Favilli, G., mucolytic effects of natural and artificial spreading factors; mucolytic effect of several diffusing agents and of diazotised compounds, III, 707.
- Favorite, G. O., instrument for obtaining bone marrow, III, 89.
- See also Sappington, S. W.
- Favorski, M. F., new polyploidy-inducing chemicals, III, 365. Clove oil in destaining slides stained with gentian-violet after Newton and its possible substitutes, III, 778. De-staining slides stained with iron hæmatoxylin, III, 778.
- Fawcett, F. S. See Sanpey, J. R.
- Fawcett, G. S., and Hewitt, J., means of measuring turbidity and fluorescence using the Lovibond tintometer fitted with Rothamsted device, I, 83.
- Fay, M. See Behrmann, V. G.
- Fay, T. See Smith, L. W.
- Fazekas, J. F., Colyer, H., and Himwich, H. E., effect of cyanide on cerebral metabolism, III, 300.
- Colyer, H., Nesin, S., and Himwich, H. E., effect of pyocyanin on cerebral metabolism, III, 300.
- and Himwich, H. E., effect of hypothermia on cerebral metabolism, III, 300.
- See also Himwich, H. E., Martin, S. J., and Sykowski, P.
- Fazio, F., adrenals and thermoregulation. II. Effect of medullary extracts in defence mechanism against cold in adrenalectomised rats, III, 896.
- Feagan, R. A., *jun.*, and Copenhaver, J. E., dialkyl adipates, II, 203.
- Fearon, W. R., introduction to biochemistry, III, 620.
- See also Press, R.
- Feasby, W. R. See Detweiler, H. K., and Kinsey, H. J.

- Feather, N., coincidence counting in a β -particle spectrograph, I, 302.
- Fechner, E. See Schüller, H.
- Feder, J. M., adaptation of the Rolls razor to new type of microtome blade, III, 89.
- Fediuchin, M. P., results obtained after administration of antireticular cytotoxic serum in cancerous patients, III, 816. Stimulation of active mesenchyme in cancerous patients by blood transfusion and injection of antireticular cytotoxins, III, 816.
- Fedorov, N. T., theory of the eye's photometric sensitivity, III, 116. Regularity underlying effect of indirect stimuli (Nebenreiz) on discrimination sensitivity of eye, III, 204.
- and Fedorova, V. I., instantaneous visual threshold after light adaptation, III, 116. Photometric sensitivity of eye, III, 116.
- Fedorov, V. V. See Aljavidin, V. N.
- Fedorova, M., binary mixtures of substances melting at low temperatures, I, 26.
- Fedorova, V. I. See Fedorov, N. T.
- Fedorova, Z. I. See Lurie, S. I.
- Fedotova, M. V. See Magidson, O. J.
- Feher, F., hydrogen peroxide and its derivatives. III. Raman spectra of D_2O_2 and HDO_2 . IV. Preparation of pure D_2O_2 , I, 95, 124.
- and Kolb, W., Raman spectra of aluminium and arsenic trimethyls, I, 57. Raman spectrum of trimethylaluminium ethyl etherate, I, 57.
- Feigelman, C. E. See Naumov, S. N.
- Feigelson, I. B., and Bergman, A. G., physico-chemical analysis of the mutual system $2NaCl + MgSO_4 \rightleftharpoons Na_2SO_4 + MgCl_2$, as applied to salt lakes. I. Annual cycles of Lake Elton, I, 413.
- See also Kurnakov, N. S.
- Feigen, G. A. See Haagen-Smit, A. J.
- Feigl, F., and Aufricht, W., detection of barium and sulphate by spot reactions, I, 130.
- and Krumholz, P., analytical behaviour of the group $CS-NH$, I, 174.
- Feil, H., and Rossman, P. L., electrocardiographic observations in cardiac surgery, III, 290.
- Fein, H. D. See Jolliffe, N.
- Feinberg, E. L., ionisation of the atom due to β -decay, I, 6.
- Feinberg, S. M., seasonal atopic dermatitis; rôle of inhalant atopens, III, 66.
- and Bernstein, T. B., asthma and hay fever, III, 635.
- Foran, F. L., Lichtenstein, M. R., Padnos, E., Rappaport, B. Z., Sheldon, J., and Zeller, M., oral pollen therapy in ragweed pollinosis, III, 938.
- See also Rubin, S. S.
- Feinblatt, H. M., Ferguson, E. A., and Alpert, B., hexamine-insulin, III, 412.
- Feiner, R. R. See Jungelblut, C. W.
- Feinier, L., and Rothman, T., study of male castrate, III, 648.
- Feinstein, K. See Büchi, J.
- Feinstein, R. N., and Gordon, E. S., specific metabolic principle of pituitary, III, 901.
- and Stare, F. J., effect of [composition of] medium and of pyrophosphate on respiration of liver, III, 908.
- Feiring, E. B. See Hillis, F. W.
- Feit, W., preparation of pure holmium [compounds], I, 228.
- Feitknecht, W., and Collet, A., chemistry and morphology of basic salts of bivalent metals. VII. Basic nickel chlorides. VIII. Basic nickel bromides. IX. Basic nickel nitrate, I, 80, 171.
- Feitrick, J. E. See Stewart, H. J.
- Fekete, E., three functional tests in high-tumour and low-tumour strain of mice, III, 506.
- Bartholomew, O., and Snell, G. D., preparation of sections of mouse embryos, III, 699.
- See also Snell, G. D.
- Feld, M. See Faure-Beaulieu, M.
- Feldbau, E. See Baehr, G.
- Feldberg, W., Fessard, A., and Nachmansohn, D., cholinergic nature of nervous supply to electrical organ of *Torpedo marmorata*, III, 297.
- and Solandt, O. M., effect of glucose and pyruvate on rabbit's gut, III, 741.
- Felding, S., and Møller-Christensen, E., clinical experience with diacetylstilbæstrol (estilbin), III, 902.
- Feldman, H. A. See Hanks, J. H.
- Feldman, J. See Bartoli, A.
- Feldman, J. B., dark adaptation, night blindness, and glaucoma, III, 116.
- See also Wohl, M. G.
- Feldman, M., effect of pyloric obstruction on filling and emptying of gall bladder in cholecystography, III, 136.
- and Morrison, T. H., inverted duodenum, III, 873.
- See also Morrison, S., and Tovbin, M.
- Feldman, W. H. See Stasney, J.
- Feldt, A. M. See Adova, A. N.
- Felix, K., and Di Marco, I., Millon's reaction of urine and effect of addition of tyrosine, III, 224.
- and Eger, W., formation of fat from carbohydrates in fat organs, III, 57.
- See also Bock, H. E.
- Fell, H. B., origin of vertebrate coelom, III, 699. Culture *in vitro* of excised embryo of an ophiuroid, III, 875.
- Fellers, C. R. See Esselen, W. B., jun. and Mindell, A.
- Fellinger, K., and Schweitzer, F., changes in blood vessels after mercury poisoning, III, 65.
- Fellows, E. J., calcium creosotate. V. Nature of phenols eliminated in urine, III, 248.
- and Livingstone, A. E., pharmacology of furfuryl- and tetrahydrofurfuryl-ammonium iodides, III, 439.
- Fellows, H. H., serial chest roentgenograms of 3179 office employees, 1926-1938, III, 683.
- Fellows, M., antigonadotropic hormones in normal human serum, III, 403.
- Fels, S. S. See Gershon-Cohen, J., Paschkis, K. E., and Shay, H.
- Felshin, G. See Frank, R. T.
- Felson, H., Schiff, L., and Garber, E. S., effect of anterior pituitary-like hormone on gastric acidity in man, III, 132.
- See also Schiff, L.
- Felsovanyi, A. con. See Bernheim, F.
- Fender, F. A., precision device for faradic stimulation, III, 84.
- Feng, S. K. See Tseng, T. P.
- Feng, T. P., and Li, T. H., acetylcholine sensitivity of a muscle and its aptitude to give contracture of the eserine type, III, 635.
- Feng, T. P., Li, T. H., and Ting, Y. C., inhibition following eserine-potentiated and post-tetanicly facilitated responses of mammalian muscles, III, 108. Development of after-discharge at amphibian neuro-muscular junctions treated with eserine, III, 109.
- Fenkner, M. See Nagel, A.
- Fenn, W. O., fate of potassium liberated from muscles during activity, III, 196. Rôle of potassium in physiological processes, III, 754.
- Wilde, W. S., Boak, R. A., and Koene-mann, R. H., effect of blood flow on potassium liberation from muscle, III, 390.
- Fenning, C., and Bonar, B. E., additional recordings obtained with oscillatocapacigraph, III, 105.
- Fenoglio, M., hydromagnesite, I, 422.
- Fenske, M. R. See Whitmore, F. C.
- Feofilaktov, V. V., synthesis of α -amino acids by means of alkylacetoacetic esters. I, II, 70.
- and Vinogradova, E., synthesis of phenylalanine from benzylmalonic and benzylcyanoacetic esters through the phenylhydrazone of phenylpyruvic acid, II, 85.
- Ferdman, D. L., and Epstein, S. F., synthesis of phosphopyruvic acid on oxidation of lactic acid, III, 822.
- Feresten, M. See Bernstein, P.
- Ferguson, A., relations between thermophysical properties [of liquids], I, 435.
- See also Cockett, A. H.
- Ferguson, C., Buchholtz, M., and Hingson, R. A., sulphapyridine in treatment of gonococcal infections after sulphanilamide failure, III, 920.
- Ferguson, E. A. See Feinblatt, H. M.
- Ferguson, G. E., and Scheffan, L., dry ice as a preventive of atmospheric oxidation, I, 377.
- Ferguson, J., use of chemical potentials as indices of toxicity, III, 253.
- Ferguson, J. B. See Sheffer, H.
- Ferguson, J. H., clotting of hæmophilic plasma by thromboplastin enzyme, III, 93. Heparin and plasma-albumin in relation to thromboplastic action of trypsin, kephalin, and brain extracts, III, 93. Heparin and blood clotting, III, 378.
- and Erickson, B. N., coagulant action of crystalline trypsin, kephalin, and lung extracts, III, 93.
- Ferguson, J. K. W. See Hamdi, T. N.
- Ferguson, L. K. See Rheinhold, J., and Starr, I.
- Ferguson, R. L., Templeton, R. D., Patras, M. C., and McJunkin, F. A., effects of thyroid and calcium therapy on growth of sarcoma transplants in thyroparathyroidectomised rats, III, 671.
- Ferguson, W. F. C., closing the compression capillary of a McLeod gauge, I, 273.
- and Hudes, I., band spectrum of antimony chloride, I, 281.
- Ferin, J. See Schockaert, J. A.
- Fermi, E., absorption of mesotrons in air and in condensed materials, I, 91. Ionisation loss of energy in gases and in condensed materials, I, 190.
- Fermor, (Str) L. L., coal veins in Malaya, I, 274.
- Fernald, A. T. See Marble, A.
- Fernandez, L. See Molitor, H.
- Fernandez, M. See Zappi, E. V.

- Fernbach, E., and Rullier, G., functional groups of glycerol in development of human and bovine strains of *B. tuberculosis*, III, 266. Millon's reaction with tuberculin prepared by precipitation, III, 689.
- Fernelius, W. C. See Cappel, N. O.
- Fernholz, E., and Ansbacher, S., vitamin-K activity of synthetic phthiocol, III, 55.
- Ansbacher, S., and MacPhillamy, H. B., vitamin-K activity of naphthaquinones, II, 181. Vitamin-K activity of quinones, II, 311.
- and Ruigh, W. L., constitution of a-spinasterol, II, 373.
- Ruigh, W. L., and Stavely, H. E., elimination of hydrogen bromide from stigmasterol 22:23-dibromide, II, 307.
- and Stavely, H. E., brassicasterol. II. Degradation by ozone, II, 170. Brassicasterol, the characteristic sterol of rapeseed oil, II, 307.
- See also Ansbacher, S.
- Ferrannini, A., and Fontana, G., effect of diuretic mercurial preparations on elimination of uric acid, III, 63.
- and Muratori, F., effect of nicotinic acid on reticulocytes, III, 6. Effect of nicotinic acid on blood picture of anemics, III, 7. Haematopoietic activity of nicotinamide and gastric juice of anaemia, III, 703.
- Ferrante, A., acetic acid and [blood]-alkali reserve, III, 11. [Blood]-alkali reserve during injection of acetic and other acids, III, 472.
- See also Zambotti, V.
- Ferrari, A., polyborates, I, 228.
- Ferrari di Caporciano, (Signa.) G. See Monti, (Signa.) L.
- Ferrarini, E., anticoagulant activity *in vivo* of sodium polyacetylenedihydroxysulphonate, III, 11.
- Ferraro, A., and Jervis, G. A., pathologic considerations on insulin treatment of schizophrenia, III, 23. Experimental disseminated encephalopathy in monkey, III, 721.
- Pacella, B. L., and Barrera, S. E., effects of lesions of medial vestibular nucleus; anatomical and physiological study in *Macacus rhesus* monkeys, III, 798, 845.
- Ferrebee, J. W., urinary excretion of riboflavin; fluorometric methods for its estimation, III, 233.
- Ragan, C., Atchley, D. W., and Loeb, R. F., deoxycorticosterone esters in Addison's disease, III, 210. Comparison of effects of deoxycorticosterone acetate, corticosterone, and cortical extract on patient with Addison's disease, III, 897.
- See also Kuhlmann, D., and Ragan, C.
- Ferree, C. E., and Rand, G., attachment to Ferree-Rand perimeter for determining light and colour minima, III, 117. Optimum working conditions for eye, III, 722. More nearly absolute method of testing and rating vision [than test types], III, 892.
- Ferretti, B. See Ageno, M.
- Ferrié, J. See Dejean, C. H.
- Ferris, E. B., and Abramson, D. I., new plethysmograph, III, 633.
- Ferris, H. B., postoesophageal left subclavian artery, ununited right oviduct, and absence of right kidney in same individual, III, 834.
- Ferris, H. W. See Tarr, L.
- Ferris, L. P., jun., and Ronzio, A. R., 4:6-dihydroxy-2-methyl-5-alkylpyrimidines, II, 193.
- Ferroir, J. See Rathery, F.
- Ferry, J. D. See Cohn, E. J.
- Fersman, A. E., geochemistry and mineralogy of the Crimea, I, 180.
- Fertel, G. E. F., Gibbs, D. F., Moon, P. B., Thomson, G. P., and Wynn-Williams, C. E., experiments with a velocity-spectrometer for slow neutrons, I, 339.
- Feskov, G. V., automatic effusimeter for determination of specific gravity of gases, I, 135.
- Fessard, A. See Feldberg, W.
- Fessler, J. See Klages, F.
- Fetche, E. S., jun. See Eichelberger, L.
- Fethke, N., effect of potassium salts of dibasic fatty acids on phagocytosis *in vitro*, III, 91.
- See also Deinse, F. van.
- Fettback, H. See Rebay, A. von.
- Fetterman, J. L., dilantin sodium in epilepsy, III, 441.
- and Spittler, D. K., vascular disorders of peripheral nerves, III, 801.
- Fevold, H. L., Lee, M., Hisaw, F. L., and Cohn, E. J., separation of five anterior pituitary hormones into different fractions by isoelectric and ammonium sulphate precipitation, III, 730.
- See also Astwood, E. B., and West, E.
- Feyel, T., nature of Q granules and their rôle in producing contraction striations in striated muscle, III, 567.
- Fialka, S. M. See Rosenthal, L.
- Fialkovskaja, O., and Katschenkov, S., absorption spectra of neodymium sulphate in light and heavy water, I, 7.
- Fiaschi, E., and Bedini, S., osmotic resistance of marrow and circulating red cells, III, 8.
- See also Merlo, P.
- Fichera, G., and Riggio, E., effect of ascorbic acid on blood-calcium and -potassium, III, 674.
- Fichter, F., and Bloch, E., electrolysis of the salts of dibasic organic acids (succinic, glutaric, pyrotartaric, and ethylmalonic acids) with nitrates, II, 35.
- and Kestenholz, K., electrolysis in the glow discharge; tetrapotassium peroxodiphosphate, I, 169.
- See also Jorissen, W. P.
- Fickling, B. W., Pincus, P., and Cooper, B. B., sulphapyridine in saliva, III, 246.
- Fidiam, J. F. See Ford, T. F.
- Fidler, H. K., Glasgow, R. D., and Carmichael, E. B., pathological changes produced by subcutaneous injection of rattlesnake (*Crotalus*) venom into *Macaca mulatta* monkeys, III, 864.
- Fiechter, N., micro-determination of blood coagulation time, III, 790.
- See also Koller, F.
- Field, E. See Evans, W. V.
- Field, H., "mongoloid spot" in Turkey and Iraq, III, 784.
- Field, H., jun., and Robinson, W. D., absence of reactions following therapeutic doses of nicotinamide, III, 323.
- See also Melnick, D., and Robinson, W. D.
- Field, H. M. See Hasler, A. D.
- Field, J. B., jun., Belding, H. S., and Martin, A. W., analysis of relation between basal metabolism and summated tissue respiration in rat, III, 237.
- See also Lewis, A. E.
- Field, J. T., and Poe, C. F., fermentation of rare sugars by colon and aërogenes groups of bacteria. III. *d*-Fucose, III, 354.
- Field, J. W., preserving outlines of leucocytes and malarial parasites in Giemsa-stained thick blood films, III, 557.
- Fieller, E. C., Irwin, J. O., Marks, H. P., and Shrimpton, E. A. G., dosage-response relation in the cross-over rabbit test for insulin. I and II, III, 440.
- Fieman, P. See Shay, H.
- Fiennes, R. N. T.-W., suspected mineral deficiency among cattle in Uganda, III, 231.
- Fierz, F., effect of female sex hormones on nipple of guinea-pig; quantitative evaluation of local nipple test; hyperpigmentation after local application of female sex hormone, III, 211.
- Fierz-David, H. E., and Blagny, L., action of formaldehyde on sulphanilic acid, II, 164.
- Brassel, J., and Probst, F., triphenildioxazines, II, 28.
- Jadassohn, W., and Pfanner, E., anaphylaxis-like reactions by sodium 8'-acylamino-2'-hydroxynaphthalene-1'-azobenzene-2:5-disulphonate, III, 254.
- Fieschi, A., follicular lymphoma, III, 557.
- Fieser, L. F., synthesis of vitamin-K₁, II, 96. Preparation of antihæmorrhagic compounds, III, 516.
- and Bowen, D. M., methyl and dimethyl derivatives of cholanthrene, II, 369.
- Campbell, W. P., Fry, E. M., and Gates, M. D., jun., naphthaquinones of the vitamin-K₁ type of structure, II, 17.
- and Cason, J., synthesis of 1:12-methylenenchrysene and 9:1'-methylene-1:2-benzanthracene from 4:5-methylene-phenanthrene, II, 272.
- and Cason, J., [with Gross, E. M.], *o*-halide synthesis of 10-methyl-9:1'-methylene-1:2-benzanthracene, II, 161.
- and Creech, H. J., conjugation of aminoacids with carbimides of the anthracene and 1:2-benzanthracene series, II, 77.
- and Fry, E. M., water-soluble antihæmorrhagic esters, II, 80.
- and Gates, M. D., jun., synthetic experiments utilising perinaphthan-7-one, II, 375.
- and Hershberg, E. B., use of hydrogen fluoride in acylations and cyclisations, II, 91. 20-Methyl-4-azacholanthrene, II, 331.
- and Johnson, W. S., synthesis of 6-hydroxy-3:4-benzopyrene and 8-*iso*-propyl-1:2-benzanthracene from 9:10-dihydrophenanthrene, II, 166.
- and Joshel, L. M., 9-methyl-3:4-benzofluorene, II, 211. 1-Methylchrysene, II, 272.
- and Kilmer, G. W., 7-cholanthroic acid, II, 309.
- and Novello, F. C., 9-methyl-3:4-benzopyrene, II, 327.
- Tishler, M., and Sampson, W. L., compounds having antihæmorrhagic activity, II, 226. Naphthaquinone oxides, II, 311.
- and Webber, T. G., meso-alkylanthraces, II, 303.
- and Wiegand, (Miss) C. W., diene synthesis of 2:3-dialkyl-1:4-naphthaquinones related to vitamin-K₁, II, 96.
- See also Tishler, M.
- Fiessinger, N. See Brugsch, T.
- Fieyre, A. See Régnier, J.

- Fife, J. G., internal electrolysis. V. Determination of small quantities of copper in presence of cadmium, I, 445.
- Figge, F. H. J., pigment metabolism; regulation of tyrosinase melanin-formation by oxidation-reduction systems, III, 608. Squid melanin: a naturally occurring reversibly oxidisable pigment, III, 746.
- Figley, K. D., karaya gum hypersensitivity, III, 691. May-fly (Ephemera) hypersensitivity, III, 938.
- Figurovski, N. A., and Rosanova, V. N., sedimentometric study of coarse disperse systems; influence of concentration of disperse phase on distribution of particles in aqueous suspensions of barium sulphate in presence of electrolytes, I, 70.
- Filatov, V. P., and Verbitzki, V. A., intramuscular injections of cod-liver oil in treatment of retinitis pigmentosa, III, 893.
- Fildes, P., mechanism of anti-bacterial action of mercury, III, 611.
See also Gladstone, G. P.
- Files, J. R., and Challenger, F., mercuration of simple derivatives of γ -pyrone, II, 262.
- Filina, A. See Konovalova, R. A.
- Filinov, P. M. See Grünberg, A. A.
- Filipesco, M. See Tudoranu, G.
- Filitti-Wurmser, S. See Wurmser, R.
- Finan, S. See Inay, M.
- Finback, C., and Hassel, O., interferences from characteristic radiation of crystals in rotation and powder diagrams, I, 388.
- Finch, C. A. See Madden, S. C.
- Finck, J. L., general equation of state; equations for ammonia and steam, I, 154.
- Findeisen, L. F., adrenaline sensitivity in patients before and after operations, III, 898.
and Szabo, Z., wound healing in diabetics, III, 898.
- Findlay, G. M., nervous affections in man and animals, III, 569.
and MacCallum, F. O., recurrent traumatic herpes, III, 543. Growth *in vitro* of virus of yellow fever, III, 937.
- Mackenzie, R. D., and MacCallum, F. O., chemotherapeutic experiments on pleuropneumonia-like organisms in rodents, III, 438.
- Findlay, R. A. See Marshall, M. J.
- Findlay, W. P. K. See Birkinshaw, J. H.
- Findley, T., jun. See White, H. L.
- Fine, A. See Brown, S.
- Fine, J., Fuchs, F., and Gendel, S., changes in plasma volume due to decompression of the distended small intestine, III, 663.
- Fuchs, F., and Mark, J., effect of deoxycorticosterone on plasma volume in intestinal obstruction, III, 728.
See also Freudenberg, R.
- Finegan, R. W. See Wilhelmj, C. M.
- Fineman, A. See Langstroth, G. O.
- Finerty, J. C., Kupperman, H. S., and Meyer, R. K., quantitative studies of cell types in rat hypophysis following administration of antigonadotropic serum, III, 847.
See also Herrick, E. H.
- Fink, F., and Richter, A. F., oil of seeds of Papilionaceae, III, 273. Characteristics and constitution of the oil of seeds of Papilionaceae, III, 273.
- Fink, H., and Just, F., biochemistry of *Torula utilis*. IV. Total sulphur, glutathione, and cystine contents of yeasts, III, 537.
See also Cohen, L., Just, F., and Scheunert, A.
- Fink, K., relationship between gastrointestinal diseases and hyperemesis gravidarum, and other disturbances of pregnancy, III, 416.
- Finkelmann, I., Hora, J., Sherman, I. C., and Horwitz, M. K., detoxication of sodium benzoate in neuropsychiatric disorders, III, 519.
- Finkelmann, E., electrical breakdown of gases at high pressure, I, 424.
- Finkelstein, A. T., high-efficiency ion source, I, 235.
- Finkelstein, H. See Beard, J. W., Sharp, D. G., and Taylor, A. R.
- Finkelstein, J. See Stiller, E. T.
- Finkelstein, M. See Fodor, A.
- Finkelstein, N. See Smith, W. W.
- Finkler, R. S., and Antopol, W., histological changes in senile vagina induced by oestrogens orally and by inunction, III, 215.
- Finland, M., treatment of pneumonia, III, 599.
- Lowell, F. C., Spring, W. C., jun., and Taylor, F. H. L., parenteral sulphapyridine; intravenous use of sodium sulphapyridine; use of glucose-sulphapyridine solution, III, 758.
- Spring, W. C., jun., and Lowell, F. C., immunological studies on patients with pneumococcal pneumonia treated with sulphapyridine, III, 244. Specific treatment of pneumococcal pneumonias: analysis of results of serum therapy and chemotherapy at Boston City Hospital (July, 1938 to June, 1939), III, 676.
See also Lowell, F. C., Spring, W. C., jun., and Taylor, F. H. L.
- Finlay, G. R. See Walker, Osman J.
- Finlay, K. H., and Cobb, S., capillary bed of locus coeruleus, III, 801.
- Finlayson, C. See Mayo, H. M.
- Finley, K. H., capillary beds of paraventricular and supraoptic nuclei of hypothalamus, III, 484.
- Finn, S. B. See Hodge, H. C.
- Fiorentini, H. See Mosinger, M.
- Fiorentino, M., and Giannettasio, G., photometric blood-sugar determination by Folin-Wu method, III, 630.
- Firenne, M. H. See Kitching, J. A.
- Firket, J., and Malter, A., biological considerations on cancer, III, 422.
See also Batta, G.
- Firor, W. M. See Thorn, G. W.
- Fischbeck, K. See Borchert, W.
- Fischer, A., use of sulphamethylthiazole, III, 920.
- Fischer, Albert, nature of growth-accelerating substance of cells, III, 88.
and Astrup, T., administration of heparin *per os*, III, 93.
- Fischer, C. C., and Agerty, H. A., sulphapyridine in pneumonia of infancy and childhood, III, 520.
- Fischer, E., dielectric relaxation with regard to molecular and intermolecular structure of dipolar liquids, I, 98.
and Klages, G., effect of quasi-crystalline structure on molecular rotation and relaxation in dipole liquids, I, 148.
- Fischer, G. See Seck, W.
- Fischer, Hans, and Kanngiesser, W., chlorophyll. XCVII. Synthesis of deoxyphyllerythrin derivatives, an isomeric porphyrin, and an isorhodin, II, 236.
and MacDonald, S. F., chlorophyll. LXXXIX. Vinyl-, hydroxyethyl-, and oxo-phyllporphyrin, II, 141.
and Ortiz-Velez, J. M., chlorophyll. XC. 2- α -Hydroxymesoisochlorin_e, dimethyl ester and vinylisochloroporphyrin_e, II, 141.
and Schröder, C. G., chlorophyll. XCII. Synthesis of rhodoporphyrin- γ -carboxylic anhydride; synthetic rhodins and verdins, II, 57.
and Stier, E., chlorophyll. XCIII. γ -Formylpyrroporphyrin, II, 109.
Stier, E., and Kanngiesser, W., chlorophyll. XCVI. Total synthesis of phaeoporphyrin_{a5}, II, 236.
and Strell, M., chlorophyll. XCL. iso- and neo-purpurins. XCV. Partial syntheses in the chlorin and purpurin series, II, 141, 235.
- Fischer, Heinz, electron emission at the cathode in the glow discharge, I, 139.
- Fischer, H. A. See Neuberg, C.
- Fischer, H. O. L. See Baer, E., and Dangschat, G.
- Fischer, J., changes in internal ear due to increased endocranial pressure; histologic basis of congestive inner ear, III, 492.
- Fischer, Joseph, vapour pressure curves of thallium, I, 389.
- Fischer, L. See Steers, A. W.
- Fischer, M. See Schöberl, A.
- Fischer, M. H., and Suer, W. J., alkali fibrinate and caseinate as catalase, III, 260.
- Fischer, M. M., Duryee, A. W., and Wright, J. S., action of deproteinized pancreatic extract (depropanex) [in intermittent claudication], III, 294.
- Fischer, M. N., physical chemistry of bacteriophage and of bacteriophage lysis, III, 77.
- Fischer, O., "forearm-lowering" symptom in slight paresis, III, 198.
- Fischer, R., device for investigating volatile and liquid substances in the micro-m.p. apparatus, I, 301. Toxicological detection of soporifics, III, 440.
and Toth, D., action of agaric, abietic, and lichesteric acid, III, 157.
See also Meinicke, E.
- Fischer, V., thermodynamics of oxygen-nitrogen mixtures, I, 106.
- Fischer-Wasels, B., aetiology of tumour formation and nature of the malignancy, III, 229. Induced immunity to malignant tumours, III, 508.
- Fischmann, C. F., and Russell, D. S., occurrence of intranuclear inclusions in cultures of fetal leptomeninges, III, 466.
- Fish, G. W. See Ragan, C., and Schroeder, H. A.
- Fish, W. R., and Dorfman, R. I., conversion of oestradiol into oestrone *in vivo*, III, 736.
See also Dorfman, R. I.
- Fishback, H. R., clinical demonstration of iron in skin in haemochromatosis, III, 9.
- Fishbein, W. I. See Bundesen, H. N.
- Fisher, A. E., Rubin, B., and Greenwald, C. K., bullous Schick reactions; their occurrence during acute infectious diseases, III, 938.
- Fisher, C. See Dey, F. L.

- Fisher, D. F. See Miller, E. V.
 Fisher, D. J., formula of jordanite, I, 334.
 See also Palache, C.
 Fisher, E. D., and Sorum, C. H., influence of sol concentration on flocculation values, I, 162.
 Fisher, H. R. See Redman, J. L.
 Fisher, J. H., Hawkins, W. L., and Hibbert, H., lignin and related compounds. XLVII. Synthesis of xylosides related to lignin plant constituents, II, 298.
 Fisher, K. C., "degree of saturation" as a factor affecting inhibition of cell respiration by cyanide or carbon monoxide, III, 432.
 and Ohnell, R., steady-state frequency of embryonic fish heart at different concentrations of cyanide, III, 840.
 See also Armstrong, C. W. J.
 Fisher, N. H., metasomatism associated with tertiary mineralisation in New Guinea, I, 181.
 Fisher, R. See Wardlaw, H. S. H.
 Fisher, R. A., Ford, E. B., and Huxley, J., taste-testing the anthropoid apes, III, 27.
 and Fry, A. S., hollow cathode source for the Zeeman effect, I, 41.
 and Vaughan, J., surnames and blood-groups, III, 379.
 Fisher, R. B., and Subrahmanyam, V., diffusion of chloride and glucose into frog muscle, III, 107.
 and Wilhelm, A. E., relation of urea and glycine to creatine synthesis, III, 327.
 Fisher, S. See Harrell, G. T.
 Fisher, W. G. See Bauer, J.
 Fishman, W. H., β -glucuronidase. II. Factors controlling the initial velocity of hydrolysis of conjugated glucuronides, III, 72.
 Fisk, J. B., and Getting, I. A., compact 750-kv. van de Graaff generator for high currents, I, 375.
 See also Getting, I. A.
 Fisk, R. See Schneider, H. J.
 Fitch, T. S. P., effect of sulphathiazole on *Staph. aureus*; epidural abscess with septicæmia and pyæmia, III, 521.
 See also Pigott, A. W.
 Fite, G. L., fuchsin-formaldehyde method of staining acid-fast bacilli in paraffin sections, III, 626.
 Fitzgerald, G. M., Greenfield, J. G., and Kounine, B., neurological sequelæ of "kernicterus," III, 300.
 Fitzgerald, O., nerve impulses from cat's vibrissæ, III, 569.
 Fitzhugh, O. G., effect of vitamin-B₁ on morphine abstinence symptoms, III, 154.
 Fitz-Hugh, T., jun. See Davis, C. L.
 Fitzpatrick, C. P. See Jasper, H. H.
 Fitzpatrick, H. D. N. See Yarnold, K. W.
 Flack, A., and Lions, F., 4:5-ethyleneisquinoline derivatives, II, 331.
 Flacks, B. See Abramson, A. W.
 Flad, M. See Grube, G.
 Flagg, J. F., and Furman, N. H., organic reagents and methods involving their use; qualitative reactions of salicylaldoxime and its 5-chloro-, 3:5-dibromo-, and 5-nitro-derivatives with inorganic ions, I, 445.
 See also Rosenblum, C.
 Flagg, P. J., asphyxia neonatorum, III, 388.
 Flammersfeld, A., absolute intensities of β -lines of thorium-B+C+C' and factor for inner transition of γ -rays, I, 52.
 Flaum, G., and Ralli, E. P., case of acromegaly, III, 404.
 Flaxman, N., rate and rhythm in hypertensive heart disease, III, 476.
 Fleck, E. E., and Palkin, S., lactonisation of dihydro-l-abietic and -l-pimaric acids, II, 18. Hydroxy-lactone from d-pimaric acid, II, 352.
 Fleet, G. A., ectopic gastric mucosa in Meckel's diverticulum, III, 622.
 Fleisch, A. See Studer, A.
 Fleischer, M. See Foote, H. W.
 Fleischhacker, H., and Lachnit, V., blood and bone marrow counts in chronic polyarthritis and Felty's syndrome, III, 556.
 Fleischmann, R., enrichment of ¹⁵N by the Clusius-Dickel separation tube process, I, 265.
 Fleischmann, W., use of colchicine in assay of androgens, III, 216.
 See also Wilkins, L.
 Fleming, A., bacteriostatic action of sulph-anilamide and M. & B. 693 and influence thereon of bacteria and peptone, III, 329.
 and Young, M. Y., inhibitory action of potassium tellurite on coliform bacteria, III, 769.
 Fleming, G., and Henderson, J. E., search for temperature changes accompanying field emission at high temperatures, I, 382.
 Fleming, G. W. T. H., Golla, F. L., and Walter, W. G., electric-convulsion therapy of schizophrenia, III, 201.
 Fleming, R. G. See Prickman, K. E.
 Flerov, and Petrjak, K. A., spontaneous fission of uranium, I, 338.
 Fletcher, A. A., and Graham, J. W., complications of diabetes mellitus with special reference to cause and prevention, III, 413.
 Fletcher, D. E. See Wolfrom, M. L.
 Fletcher, E. S., jun. See Eichelberger, L.
 Fleury, P., and Boisson, R., action of periodic acid on pyruvic, acetic, and propionic acid, II, 34.
 Fleury-Larsoneau, (Mlle.) A., β -aminobutane, di-sec.-butylamine, n-butyl-sec.-butylamine, and their preparation in optically active state, II, 70.
 Flexner, J., and Kniazuk, M., continuous recording of gastric pH *in situ*, III, 583.
 Kniazuk, M., and Nyboer, R., continuous recording of gastric pH *in situ*, III, 34.
 and Wright, I. S., effect of acetyl- β -methylcholine (mecholy) on gastric secretion in animals and in man, III, 133.
 Flexner, L. B., onset of secretory activity in metanephros of foetal pig; cytochrome-oxidase-cytochrome system and redox potentials, III, 137.
 and Grollman, A., reduction of osmic acid as indicator of adrenal cortical activity in rat, III, 726.
 and Pohl, H. A., transfer of radioactive sodium across placenta of cat, III, 850.
 and Roberts, R. B., measurement of placental permeability with radioactive sodium: relation of placental permeability to foetal size in the rat, III, 662.
 Flexner, L. A. See Gording, R.
 Flickinger, E. See Freudenberg, K.
 Fliegelman, M. T. See Rhoads, J. E.
 Flinn, F. B. See Vonglath, W. C.
 Flinn, M., rapid staining method for opsonocytphagocytic indices, III, 188.
 Flint, H. T., theory of the electric charge and the quantum theory. I, I, 242, 280.
 Flint, L. H., and Moreland, C. F., response of lettuce seedlings to 7600 Å. radiation, III, 460.
 Flippin, H. F., Schwartz, Leon, and Rose, S. B., comparative effectiveness and toxicity of sulphathiazole and sulphapyridine in pneumococcal pneumonia, III, 676.
 See also Pepper, D. S., Reinhold, J. G., and Schwartz, Leon.
 Flocks, R. H., urinary calcium and phosphorus in cases of renal calculus, III, 223.
 Floderer, J. See Schulek, E.
 Flood, C. A. See Gutman, A. B.
 Flood, J. M., and Mayer, V., inadequacy of Laugher and Ide test in diagnosis of syphilis, III, 170.
 Florey, H. W. See Ebert, R. H., and Lium, R.
 Florinski, F. S. See Koton, M. M.
 Florin, M., and Crismer, R., application of the photometric determination of conjugated glucuronic acids to urine, III, 224. Photometric estimation of glucuronically conjugated substances of the ether-oxide type in the urine, III, 813.
 and Duchateau-Bosson, G., inhibition of pyrocatechol-oxidase by dihydroxymaleic acid, III, 161. Blood-sugar of crawfish after injection of adrenaline or insulin, III, 287.
 and Frappez, G., concentration of blood-ammonia of invertebrates, III, 707.
 and Toussaint, C., two degradation products of haemocyanin, II, 197.
 See also Duchateau-Bosson, G.
 Florstedt, H., and Pohlmann, R., percutaneous administration of drugs by ultrasonic waves, III, 929.
 Flory, P. J., kinetics of polyesterification; effects of mol. wt. and viscosity on reaction rate, I, 120. Viscosities of linear polyesters; exact relationship between viscosity and chain length, I, 315. Kinetics of degradation of polyesters by alcohols, I, 414. Comparison of esterification and ester interchange kinetics, I, 416. Molecular size in ethylene oxide polymerides, II, 321.
 Florsdorf, E. W., Boerner, F., Lukens, M., and Ambler, T. S., cryochem-preserved complement of guinea-pig serum, III, 629.
 Floyd, W. F., inhibition of respiration at sub-optimum substrate concentrations, III, 675.
 Flügge, S. See Hahn, O.
 Flygare, H. See Criegee, R.
 Flynn, J. E., and Warner, E. D., prothrombin levels and synthetic vitamin-K in obstructive jaundice of rats, III, 469.
 See also Warner, E. D.
 Flynn, L. M. See Kohl, M. F. F.
 Flynn, T. T., and Hill, J. P., growth of ovarian ovum, maturation, fertilisation, and early cleavage in Monotremata, III, 552.
 Foà, P., and Fornaroli, P., [urinary] phosphate excretion during muscular work, III, 158.
 See also Margaria, R.
 Focke, A. B., segregation of polonium in bismuth crystals, I, 337.
 See also Hartmann, G. K., and Shear, S. K.

- Fodor, A., Wrinch's theory of protein structure, II, 317. Structure of the acropeptide and peptone obtained from gelatin; hydrolysis of the acropeptide and peptone with papayotin, III, 686.
- and Finkelstein, M., action of yeast proteinase on gelatin and caseinogen acropeptide, III, 535.
- Föckeler, J. See Strauss, L. H.
- Foerster, H. R., and Schwartz, Louis, industrial dermatitis and melanosis due to photo-sensitisation, III, 159.
- Fog, M. See Lunn, V.
- Fogelberg, A. See Gulliksen, D. P.
- Fogelson, S. J., and Bachrach, W. H., response of Brunner's glands to secretin, III, 415.
- See also Wigodsky, H. S.
- Fogg, A., mechanism of boundary lubrication suggested by the static friction of esters, I, 253.
- Fogg, L. C., and Warren, S., centriole in irradiated tumour tissue, III, 748.
- Foglia, V. G., and Braun-Menéndez, E., graphic registration of lymphatic heart in the toad, III, 103. Thermic, endocrine, and pharmacological influences on lymphatic hearts of the toad, III, 291.
- Fokker, A. D., mass centre in relativity, I, 343.
- Folch, J., and Van Slyke, D. D., preparation of blood-lipin extracts free from non-lipin extractives, III, 13.
- Foley, J. O., and DuBois, F. S., cervical sympathetic trunk, III, 715.
- Foley, M. P., Snell, A. M., and Craig, W. McK., anterior pituitary tumour associated with cachexia, hypoglycemia, and duodenal ulcer, III, 301.
- Folk, C. E., longevity of sperm in female bat, III, 622.
- Folkers, K., and Koniuszy, F., *Erythrina* alkaloids. VI. Constitution of erythramine. VII. Isolation and characterisation of new alkaloids, erythraline and erythratine. VIII. Constitution of erythramine and erythraline. IX. Isolation and characterisation of erysodine, erysopine, erysoccine, and erysovine, II, 29, 197, 332.
- and Unna, K., *Erythrina* alkaloids. V. Comparative curare-like potencies of species of *Erythrina*, III, 338.
- See also Harris, A. S., and Stiller, E. T.
- Folkins, H. O. See Steacie, E. W. R.
- Folley, S. J., sex difference in response of the pigeon crop gland to prolactin, III, 128.
- and Watson, H. M. S., stilboestrol and abortion in cow, III, 31.
- Watson, H. M. S., and Bottomley, A. C., diethylstilboestrol dipropionate and lactation in goats, III, 581.
- See also Bottomley, A. C., and Van Heuverswyn, J.
- Follis, R. H., jun., and Rich, A. R., effect of sulphanilamide on experimental tuberculosis, III, 330.
- Folsom, T. R., 600-kv. a.c. generator for production of neutrons, I, 375.
- Foltz, L. M. See Rothermich, N. O.
- Fonda, G. R., preparation of fluorescent calcite, I, 264.
- Fongi, E. G., action of various substances on insulin hypoglycemia in hypophysectomised dogs, III, 577.
- Fonio, A., examination of thrombocytes in dark field, III, 93.
- Fontaine, M. See Roche, J.
- Fontana, G. See Ferrannini, A.
- Fonteyne, R., infra-red and Raman spectra of polyatomic molecules. XI. Dimethyl sulphide, Me₂S, I, 95.
- Food, A. G., and Baisinger, C. F., comparison of tests for bilirubin in urine, III, 587.
- Food, S. G., thermal polymerisation of styrene and its inhibition, I, 167.
- Foot, N. C., meningioma, III, 801.
- Baker, L. E., and Carrel, A., behaviour of abnormal human thyroid tissue cultivated in Lindbergh apparatus, III, 406.
- Foot, C. L., response of gonads and gonaducts of *Amblystoma* larvæ to treatment with sex hormones, III, 734.
- and Witschi, E., effect of sex hormones on gonads of frog larvæ (*Rana clamitans*): sex inversion in females; stability in males, III, 658.
- Foot, F., and Jette, E. R., fundamental relation between lattice constants and density, I, 349.
- Foot, H. W., and Fleischer, M., additive compounds of iodine with alkali bromides and thiocyanates, I, 322. Iodides of multivalent metals, I, 322. Solid polyiodides of rubidium, I, 322.
- Foot, J. J. See Grafflin, A. L.
- Foot, M. W. See Pierce, H. B.
- Foot, P. A., and Gramling, L. G., seeds of *Glottidium vesicarium*, III, 832.
- Footer, A. W. See Tainter, M. L.
- Foran, F. L. See Feinberg, S. M.
- Forbes, A., the synapse, III, 21.
- See also Renshaw, B., and Therman, P. O.
- Forbes, E. B., nutritional physiology of adult ruminant, III, 229.
- Black, A., Thacker, E. J., and Swift, R. W., utilisation of energy-producing nutriment and protein as affected by the level of intake of beef-muscle protein, III, 48.
- Bratzler, J. W., Thacker, E. J., and Marcy, L. F., dynamic effects and net energy values of protein, carbohydrate, and fat, III, 48.
- See also Bratzler, J. W.
- Forbes, G. S., and Anderson, H. H., cyanates of silicon, phosphorus, and boron; instability of ternary boron compounds, I, 265.
- See also Tambllyn, J. W.
- Forbes, H. S., and Nason, G. I., effect of metrazol on cerebral vessels, III, 708.
- Forbes, I. A., and Percival, E. G. V., agar-agar. II. Isolation of derivatives of 3:6-anhydro-*l*-galactose from agar; synthesis of their enantiomorphs, II, 35.
- Forbes, J. C., and Outhouse, E. L., mechanism of protective action of xanthine against carbon tetrachloride poisoning, III, 337.
- Outhouse, E. L., and Leach, B. E., effect of foods on serum-esterase of rats, III, 707.
- See also Bowers, R. V., and Gersberg, H.
- Forbes, R. M. See Swift, R. W.
- Forbes, R. P. See Moore, M. L.
- Forbes, T. R., reproductive system of alligator. V. Effects of injections of testosterone propionate in immature alligators. VI. Hetero-sexual structures in female alligator, III, 646, 874.
- Forbes, W. C., and Neville, H. A., Wijs iodine values for conjugated double bonds; influence of sample-reagent ratio, II, 145.
- Forbes, W. F., and Czarski, Y., level of [blood]-glucose and non-fermentable reducing substances in therapeutic insulin shock, III, 644.
- Ford, E. B. See Fisher, R. A.
- Ford, F. R., and Walsh, F. B., tonic deviations of eyes produced by movements of head, with special reference to otolith reflexes; clinical observations, III, 723.
- Ford, R. L., determination of fluorides in natural waters, I, 419.
- Ford, T. F., Loomis, A. G., and Fidiom, J. F., colloidal behaviour of clays as related to their crystal structure, I, 161.
- See also McBain, J. W., and Mistretta, A. G.
- Ford, W. See Gray, S. W.
- Foreman, E. L., and McElvain, S. M., reaction of organic halides with piperidine. V. Negatively substituted ethyl bromides. VI. Branched-chain β -bromesters, II, 296, 302.
- Forester, H. B. See Bast, T. H.
- Foresti, B., electromotive behaviour of nickel in presence of hydrogen. II, I, 219.
- [with Pozzi, F.], influence of the p_H on velocity of hydrogenation of cyclohexene and of acetone in presence of Raney nickel, I, 225.
- Forest, J., hydrated calcium silicates, I, 228.
- Forman, S. E. See Krantz, J. C., jun.
- Formijne, P., [factors in] pernicious anemia, III, 468.
- Fornaroli, P., and Capraro, V., utilisation of pyruvic acid in heart-lung preparations, III, 58.
- See also Capraro, V., and Foà, P.
- Fornaseri, M., petrographic studies of the region of Monte Besimaua (Maritime Alps), I, 86.
- Forni, P. A. See Hansen, L. A.
- Forrer, R., magnetic moments in ferromagnetic alloys. II. Gyromagnetic effect; relation between supplementary moments and the Curie points, I, 206.
- Forrest, J. W., spectrographic design and its problems, I, 40.
- Forró, M. See Barnóthy, J.
- Forsham, P. H. See Barcroft, J.
- Forsman, N. See Euler, H. von.
- Forsyth, A. C., and Dowdell, R. L., cobalt-nickel-silicon system between 0 and 20% of silicon, I, 291.
- Forsyth, G., pink disease treated by vitamin-B₁₂, III, 914.
- Forthner, C. E., monocytic leukaemia and subleukemic leukaemia, III, 276.
- Forti, C., nutritive value of sheep's milk, III, 425.
- Fortunatov, M. S., and Michailovskaja, V. I., velocity of oxidation of molten iron with pure oxygen, I, 297.
- Fosbinder, R. J. See Barthen, C. L., and Walter, L. A.
- Foschini, A., and Talenti, M., determination of formaldehyde. II. Ammonia method, II, 146.
- Foshag, W. F., petrology of the Shallowater, Lubbock Co., Texas, meteorite, I, 178.
- Foshay, L., laboratory diagnosis of undulant fever, III, 540.
- Foss, H. L., Hunt, H. F., and McMillan, R. M., thyroid crisis, III, 122.
- Foster, C. K. See Hodgson, H. H.
- Foster, D. G., preparation of seleno-*o*- and -*m*-cresol, II, 30.

- Foster, D. P. See Lowrie, W. L., *jun.*
 Foster, F. I. See Reynolds, S. R. M.
 Foster, G. L. See Graff, S., and Rittenberg, D.
 Foster, J., ophthalmic injuries from mustard gas, III, 300.
 Foster, J. E. See Halverson, J. O.
 Foster, L. S., reaction of gallium with perchloric acid and preparation and properties of gallium perchlorate hydrates, I, 35.
 Foster, M. A. See Pfeiffer, C., and Stormont, R. T.
 Foster, M. G., conductivity and mobility of thin lead films, I, 103.
 Foster, R. H. K., rôle of oxalic acid in blood clotting, III, 706.
 Lee, J., and Solmsen, U. V., sodium salt of 2-methyl-1:4-naphthaquinol diphosphoric ester, III, 431.
 See also Koppanyi, T.
 Fostvedt, G. A., effect of high melanophore hormone fractions on tyrosine and dopa oxidations, III, 730.
 Foucar, H. O., congenital abnormalities of external ear, III, 873.
 Fouillouze, (Mlle.) R. See Bernard, R.
 Foulds, L., histological analysis of tumours: critical review, III, 671.
 and Dmochowski, L., neutralising and complement-fixing properties of antisera produced by fractionated extracts of non-filterable dibenzanthracene fowl sarcoma, III, 228.
 Fourcade, J. See Cristoly, P.
 Fournet, P. See Tournade, A.
 Fournneau, E., and Billeter, J. R., glycidamides [α -oxidopropionamides] with hypnotic properties; Claisen-Darzen reaction, II, 71.
 Fourt, L. See Harkins, W. D.
 Fourt, P. C. See Harkins, W. D.
 Foust, H. L., inherited eye defect in guinea-pig, III, 891.
 Fouts, P. J., Helmer, O. M., and Lepkovsky, S., factor II deficiency in dogs, III, 858.
 See also Page, I. H.
 Fowler, A. F., Bensley, E. H., and Rabinowitch, I. M., diabetic coma [treatment with insulin], III, 499.
 Fowler, D. L., and Kraus, C. A., electrolytic solutions. XXII. Conductance of ethylene dichloride solutions of quaternary ammonium salts having large negative ions, I, 413. Quaternary ammonium salts with anions containing triphenylboron, II, 317.
 Loebenstein, W. V., Pall, D. B., and Kraus, C. A., unusual hydrates of quaternary ammonium salts, II, 268.
 Fowler, E. P., head noises and deafness: peripheral and central, III, 118.
 Fowler, E. V. See Price, J. W.
 Fowler, J. B. See Rennie, T. A. C.
 Fowler, J. L. A. See Cleghorn, R. A.
 Fowler, M. J. See Blankstein, S. S.
 Fowler, R. D. See Dodson, R. W.
 Fowler, R. H., and Guggenheim, E. A., statistical thermodynamics of superlattices, I, 205.
 Fowler, W. A., and Lauritsen, C. C., low-energy γ -radiation from lithium bombarded with protons, I, 4. Pair emission from fluorine bombarded with protons, I, 4.
 See also Sheppard, C. W.
 Fowweather, F. S., silicosis and the analyst, III, 158.
 See also Moll, H. H.
 Fox, C. A., basal telencephalic centres in cat, III, 716.
 Fox, Carl L. See Friedman, H. B.
 Fox, Charles L., *jun.*, significance of oxidation of sulphanilamide during therapy, III, 519. Is sulphanilamide bacteriostatic under anaërobic conditions? III, 755.
 and Cline, J. E., occurrence of methæmoglobinæmia during sulphanilamide therapy, III, 246.
 Fox, D. L. See Emerson, Ralph.
 Fox, F. E., and Rock, G. D., ultrasonic stroboscope for measuring sound wavelengths in liquids, I, 40.
 Fox, G. W., and Ryan, A. H., dielectric constants of ammonia, nitrogen, and carbon dioxide at ultra-high frequency, I, 58.
 Fox, H., acute myocarditis in wild animals with especial reference to the opossum, III, 291.
 Fox, H. M., function of chlorocruorin in *Sabella* and of hæmoglobin in *Lumbricus*, III, 712.
 See also Ewer, R. F.
 Fox, J. J., and Martin, A. E., infra-red spectra (2.5—7.5 μ); absorption of water, I, 193. Infra-red spectra; determination of C-H frequencies (~ 3000 cm.⁻¹) in paraffins and olefines; observations on "polythenes," I, 232. Infra-red absorption of hydroxyl group in relation to inter- and intra-molecular hydrogen bonds, I, 400.
 Fox, M., and Hardgrove, M., scarlet fever therapy; comparison of convalescent serum and sulphanilamide, III, 522.
 Fox, S. W. See Tyler, A.
 Fox, T. See Gold, H.
 Fox, W. W., Rosi, R., Winters, W. L., and Lammers, D., Sabin agglutination test as control of sulphapyridine treatment of pneumonia, III, 757.
 Fradà, G. See Cioglia, L.
 Fraenkel, G., and Hopf, H. S., physiological action of abnormally high temperatures on poikilothermic animals. I. Temperature adaptation and degree of saturation of phosphatides, III, 746.
 and Rudall, K. M., physical and chemical properties of insect cuticle, III, 668.
 Fraenkel, M. See Eisenstaedt, J. A., and Hechter, O.
 Fraenkel-Conrat, H. L., Meamber, D. L., Simpson, M. E., and Evans, H. M., further purification of growth hormone of anterior pituitary, III, 900.
 Simpson, M. E., and Evans, H. M., effect of cysteine on gonadotropic hormones, III, 121. Effect of thiol compounds on gonadotropins, III, 737.
 See also Fraenkel-Conrat, J.
 Fraenkel-Conrat, J., Fraenkel-Conrat, H. L., Simpson, M. E., and Evans, H. M., purification of thyrotropic hormone of anterior pituitary gland, III, 900.
 Frahm, H., osmotic pressure, I, 19.
 Fralick, F. B. See Weinman, E. B.
 Frame, G. F. See Allen, C. F. H.
 Frampton, V. L., mol. wt. of the tobacco-mosaic virus protein, III, 172, 358.
 François, J. See Cordier, D.
 France, H., Heilbron, I. M., and Hey, D. H., nitrosoacylarylamines. III. New method of preparation, II, 163.
 Franche, M. See Slatineau, A.
 Francis, C. G., factors influencing appearance of centres of ossification during early childhood. I. II. Comparative study of degree of epiphysal ossification in infancy under varying conditions of diet and health, III, 2, 621. Growth of human tibia, III, 87. Appearance of centres of ossification from 6 to 15 years, III, 781.
 Francis, C. F., prepenial scrotum (marsupial type of genitalia) associated with absence of urinary system, III, 782.
 Francis, L. D. See Strong, L. C.
 Francis, T. See Stock, C. C.
 François, J., influence of immunologica factors on cataract production, III, 489.
 Frank, A., differences of skin reaction with hard and soft X-radiation, III, 529.
 See also Clifton, W. M.
 Frank, G. See Smith, G. Frederick.
 Frank, H. See Karrer, P., and Minot, A. S.
 Frank, J. D., production of alarm reaction in young rats by trans-section of spinal cord, III, 889.
 Frank, R. T., sex hormones, II, 735. Modification of Zondek alcohol method for determining luteinising and follicle-stimulating principles in urine, III, 214.
 and Berman, R. L., comparison of four methods of bioassay for gonadotropic factors, III, 214.
 Goldberger, M. A., and Felshin, G., investigations of newer sex hormone preparations, III, 903.
 See also Klemmner, E.
 Frank-Kamenetzki, D. A., carbon dioxide reduction, I, 31. Induction period in thermal explosions, I, 165. Periodic processes in kinetics of oxidation reactions, I, 224. Resonance theory of auto-catalysis, I, 224. Temperature distribution in reaction vessel, and stationary theory of thermal explosion, I, 259. Diffusion theory of heterogeneous reactions, I, 260.
 Franke, H., use of stilbene preparations in extragenital ovarian insufficiency symptoms, III, 655.
 See also Krebs, K. G.
 Franke, K. See Brugsch, T.
 Franke, K. W. See Painter, E. G., and Poley, W. E.
 Franke, W., and Deffner, M., glucose oxidase. II, III, 161.
 See also Deffner, M.
 Franke, Wilhelm, biological degradation and synthesis of amino-acids, III, 517.
 Frankel, J. J. See Mountain, E. D.
 Frankel, M., Neufeld, O., and Katchalski, E., carbamates of α -amino-acid esters and their polycondensation, II, 7.
 Frankel, S. I., dilantin sodium in epilepsy, III, 602.
 Frankel, S. P., thermal diffusion, I, 290.
 Frankhauser, G., sex differentiation in triploid newts (*Triturus viridescens*), III, 784.
 Frankl, F. See Jentschke, W.
 Franklin, H. C. See Cooper, Z. K.
 Franklin, K. J., Barclay, A. E., and Prichard, M. M. L., cardio-vascular system in viable foetal lamb, III, 873.
 See also Barclay, A. E.
 Franklin, R. G. See Allen, A. J.
 Franseen, C. C. See Nathanson, I. T.
 Franz, W., theory of electrical breakdown of crystalline insulators, I, 9.

- Frappez, G. See Duchateau-Bosson, G., and Florin, M.
- Fraps, G. S., and Carlyle, E. C., utilisation of energy of wheat products by chickens, III, 318. Relation of gain in weight to gain in energy content of growing chicks, III, 509.
- Kemmerer, A. R., and Greenberg, S. M., factors affecting adsorptive power of magnesia for carotene, III, 370.
- Fraser, A. H. H., Godden, W., Snook, L. C., and Thomson, W., ketonæmia in pregnant ewes and its possible relation to pregnancy disease, III, 214.
- Fraser, D. T., diphtheria toxoid, III, 263.
- Fraser, E. A., and Renton, R. M., breeding and development of viviparous fish, *Heterandria formosa*, III, 553.
- Fraser, H. F., Topping, N. H., and Isbell, H., bacterial assay of riboflavin in urine and tissues of normal and depleted dogs and rats, III, 513. See also Pittman, M.
- Fraser, R., viability of hæmolytic streptococci in stock cultures, III, 688.
- Fray, W. F., cardiomeasuror, III, 631.
- Frazer, A. C., and Walsh, V. G., detoxication by finely dispersed oil-in-water emulsions and their intravenous use, III, 157.
- Frazer, J. H., and Kirkpatrick, W. J., new mechanism for action of the vanadium pentoxide-silica-alkali pyrosulphate catalyst for the oxidation of sulphur dioxide, I, 366.
- Frazier, C. N. See Hu, C. K.
- Fréchet, V. D. See Schurecht, H. G.
- Freda, V. C. See Cohen, H. R.
- Fredenhagen, H. See Fredenhagen, K.
- Fredenhagen, K., and Fredenhagen, H. [with Kerck, E., and Behrendt, W.], determination of molecular b.p. elevations of inorganic and organic compounds in anhydrous hydrofluoric acid (water, deuterium oxide, potassium sulphate, potassium perchlorate, phenols, ketones, ethers), I, 116.
- Frederick, C. A., Guerrant, N. B., Dutcher, R. A., and Knight, C. A., urinary excretion of ascorbic acid by rat as influenced by ingestion of certain carbohydrates, III, 751.
- Fredericq, H., secondary refractory period of cardio-inhibitory mechanism of vertebrates. IV. Secondary refractory period of inhibitory effect, III, 190. Action of cardiac nerves of *Aplysia limacina* analysed by use of caffeine, III, 291. Cardio-inhibitory action of visceral nerve of cephalopods (*Eledone moschata*), III, 630.
- and Bacq, Z. M., effects on heart of stimulation of visceral nerves of cephalopods, III, 291. Neuro-humoral control in cephalopods, III, 636.
- Frediani, H. A. See Choppin, A. R.
- Fredrich, A. See Zetzsche, F.
- Free, A. H., non-identity of grey hair produced by mineral deficiency and vitamin deficiency, III, 915.
- and Bing, F. C., wheat as a dietary source of iron, III, 857. See also Myers, V. C.
- Freed, H. See Bellet, S., and Spiegel-Adolf, M.
- Freed, S., Sugarman, N., and Metcalf, R. P., magnetic susceptibility of silver subfluoride, I, 200.
- Freed, S., Weissman, S. I., and Rotariu, G. J., Zeeman effect from liquids, solutions of salts of europium, I, 195. See also Weissman, S. I.
- Freed, S. C., Hechter, O., and Soskin, S., inadequacy of vaginal smear in rat as index of ovarian dysfunction caused by diet, III, 580. See also Greenhill, J. P.
- Freedman, H. See MacBryde, C. M.
- Freeman, B. S., zinc peroxide in malignant lesions, III, 928.
- Freeman, G. G., Challinor, S. W., and Wilson, J., use of synthetic medium in isolation of somatic antigens of *B. typhimurium* and *B. typhosum*, III, 455.
- Freeman, G. L., and Hoffman, E. L., electrical integrator for "action currents," III, 945.
- Freeman, H., skin and body temperature of schizophrenic and normal subjects under varying fundamental conditions, III, 23. Heat regulatory mechanisms in normal and in schizophrenic subjects under basal conditions and after administration of dinitrophenol, III, 720. See also Neustatter, W. L., and Rubin, M. A.
- Freeman, H. E., and Koletzky, S., cutaneous lesions in monocytic leukaemia, III, 8. See also Schwartz, W. F.
- Freeman, I. M., life-time of the mesotron, I, 5. Red shift of the nebular spectrum lines, I, 184.
- Freeman, J. A. See Artom, C.
- Freeman, P. R. See Rigdon, R. H.
- Freeman, S. See Clifton, W. M.
- Freeman, Smith, See Chen, Y. P.
- Freeman, W., and Watts, J. W., functions of frontal lobe based on observations in 48 cases of pre-frontal lobotomy, III, 111. See also Lee, M., and Looney, J. M.
- Freiberg, I. K. See Greaves, J. D.
- Freidlin, L. C., and Lebedeva, A. I., reaction of sodamide with non-enolising carboxylic compounds, II, 35.
- Freidlina, R. C., and Nesmejanov, A. N., structure of additive products of metal halides and unsaturated compounds, II, 246.
- Freilich, E. B., Coe, G. C., and Wien, N. A., use of sulphanilamide in pulmonary tuberculosis, III, 438.
- Freiman, D. G., Engelberg, H., and Merrit, W. H., oil aspiration pneumonia in adults, III, 842. See also Perla, D.
- Fremont-Smith, F., influence of emotional factors on physiological and pathological processes, III, 801.
- French, C. S., pigment-protein compound in photosynthetic bacteria. I. Extraction and properties of photosynthin. II. Absorption curves of photosynthin from several species of bacteria, III, 539.
- French, K. S. See Idles, H. A.
- French, M. H., digestive powers of zebu and high-grade European cattle, III, 748.
- French, R. B., assay of vitamin-A with photo-electric colorimeter, III, 673.
- French, S. G. See Horan, V. G.
- Freneckner, P., movements of tympanic membrane and of malleus in normal cases and in cases of otosclerosis, III, 399. Registering movements of tympanic membrane in living person, III, 399.
- Frenkel, B. E. See Kiprianov, G. I.
- Frenkel, J. I. See Bresler, S. E.
- Frenzel, F., metabolism of suckling foals. I. Nutrition and development. II. Utilisation of milk, III, 237.
- Fréron, A. See Auger, P.
- Freri, M., action of hydrazine hydrate on derivatives of organic acids, II, 157. and Solza, A., nitrocinnamoyl derivatives, II, 129.
- Fresenius, W., and Karweil, J., normal vibrations and configuration of hydrazine. II. Infra-red spectrum of hydrazine, I, 8.
- Freud, J., comparison of diethylstilboestrol and other oestrogenic compounds, III, 129. Influence of low temperature on cytology of new-born rats, III, 701.
- Freudenberg, E., and Buchs, S., second proteolytic enzyme of gastric juice; cathepsin, III, 663.
- Freudenberg, K., Lautsch, W., and Engler, K., lignin. XXXIV. Formation of vanillin from spruce lignin, II, 352.
- Meisenheimer, H., Lane, J. T., and Plankenhorn, E., steric series. XXIII. Configuration of the tertiary carbon atom. III, II, 219.
- Richtzenhain, H., Flickinger, E., and Engler, K., lignin. XXV. Model experiments on the lignin question, II, 100.
- Schaaf, E., Dumpert, G., and Ploetz, T., starch, II, 120.
- Freudenberg, R., and Fine, J., symptoms of hyperinsulinism in relation to blood sugar and keto-bodies of blood, III, 499.
- Freudenberg, W., and Sheehan, J. T., chemistry of naturally occurring mono-anhydrohexitols. II. Synthetic tetramethylstyrcitol, II, 150.
- Freudenberger, C. B., and Hashimoto, E. I., quantitative results of ovariectomy in immature and adult albino rats, III, 126. See also Clausen, F. W.
- Freund, E., joint cartilage under differing physiological demands, III, 621. Osteochondritis dissecans of head of femur, III, 698.
- Freund, J., and Behan, M. A., type-specific antibody production with living pneumococci in the rabbit, III, 169. and Bonanto, M. V., diphtheria antitoxin production after intravenous or subcutaneous injection of alum toxoid, III, 770.
- Freundlich, H., and Krüger, D., anomalous diffusion of [benzo]quinone in salt solutions, I, 19.
- Freundlich, J., and Lepeschkin, E., multiple chest leads in right and left axis preponderance, III, 98.
- Frevel, L. K., crystal structure of sodium sulphate III, I, 199.
- Frey, C. N. See Schultz, A. S.
- Frey, C. T. See Katz, G.
- Frey, E. See Weibke, F.
- Frey, F. W., embolism and thrombosis of abdominal aorta, III, 100.
- Frey, Hugo, See Ruggli, P., and Wettstein, A.
- Frey, (Mme.) Hugues, complexes formed by molybdic acid in aqueous solution, I, 80.
- Frey, L. I. See Katz, G.
- Frey-Wyssling, A., optics of starch grains, I, 350. Analysis of shape double-refraction curves, I, 358. and Blank, F., growth of protoplasm and nitrogen migration in the coleoptile of *Zea mays*, III, 775.

- Freyberg, R. H., Block, W. D., and Fromer, M. F., sulphur metabolism and effect of sulphur administration in chronic arthritis, III, 519.
- Freyhold, H. von. See Stackelberg, M. von.
- Freymann, R. See Stora, C., and Vodar, B.
- Freze, N. A., volumetric adsorptional method of determining calcium, I, 38.
- Fricke, E. See Knudsen, V. O.
- Fricke, H., and Parker, E., dielectric properties of the system gelatin-water. II, 1, 358.
- Fricke, H. H. See Longenecker, H. E.
- Fricke, R., and Blaschke, F., surface energy of cadmium oxide and heat of formation of cadmium hydroxide, I, 295.
- and Schweckendiek, W., active substances. XLIV. Heat content and lattice condition of active nickel, I, 323.
- and Wiedmann, H., active substances. XLI. Characterisation of transition of amorphous hydrated ferric oxide to α -ferric oxide by sorption and catalytic measurements, I, 123.
- Fridericia, L. S., Gudjonsson, S., Vimtrup, B., Clemmesen, S., and Clemmesen, J., stomach lesions in rats kept on diets deficient in vitamin-A, III, 669.
- Fridman, G. B., basic chlorides. I, 1, 74.
- Fridman, J. D. See Dumanski, A. V.
- Fridman, K. S. See Pamfilov, A. V.
- Fried, J., Rubin, M., Paist, W. D., and Elderfield, R. C., syntheses of model unsaturated lactones related to the cardiac aglycones, II, 312.
- Friedberg, L. See Katz, L. N., and Megibow, R. S.
- Friedell, H. L. See Keys, A.
- Friedemann, T. E., carbohydrate metabolism of streptococci, III, 169. Carbohydrate metabolism of *Oidium lactis* and *B. subtilis* in complex carbohydrate-rich culture medium, III, 540.
- and Seibert, F. B., metabolism of tubercle bacillus in Long's synthetic medium, III, 266.
- and Suttiff, W. D., appearance of fermentable polysaccharide in blood and simple method for its detection, III, 187.
- Friedenberg, S., addiction to benzedrine, III, 603.
- Friedenson, M., origin of ammonia in urine under normal circumstances and in kidney disease, III, 223.
- Friedenwald, J. S. See Woods, A. C.
- Friedewald, W. F., identity of "inhibitor" and antibody extracts of virus induced rabbit papillomas, III, 912.
- Friedgood, H. B., and Cannon, W. B., autonomic control of thyroid secretion, III, 496.
- and Dawson, A. B., physiological significance and morphology of carmine cell in cat's anterior pituitary, III, 730.
- and Whidden, H. L., determination of crystalline androsterone with Evelyn photoelectric colorimeter, III, 216. Spectrophotometric study of Cesting colorimeter and of colours developed with crystalline androsterone and urinary ketosteroids by Cesting modification of Zimmermann reaction, III, 848.
- Friedgood, H. B., and Whidden, H. L., variables which affect colour development in modification of Zimmermann's reaction, and a spectro-photometric analysis of colours developed with ketosteroids, III, 849. Colorimetric determination of crystalline and urinary ketosteroids, III, 849.
- See also Dawson, A. B.
- Friedlaender, G. See Seaborg, G. T.
- Friedlander, M., Silbert, S., and Bierman, W., regulation of circulation in skin and muscles of lower extremities, III, 565.
- Friedman, B., familial retinal degeneration leading to detachment and cataract formation, III, 115.
- Somkin, E., and Oppenheimer, E., relation of renin to adrenal gland, III, 566.
- Friedman, B. S. See Schmerling, L.
- Friedman, G. J. See Ralli, E. P., and Sherry, S.
- Friedman, G. S. See Friedman, M. H.
- Friedman, H., and Beeman, W. W., copper and nickel X-ray $K\beta_{2,5}$ -emission lines and K-absorption limits in copper-nickel alloys, I, 424.
- See also Bearden, J. A.
- Friedman, H. B., Barnard, A., Doe, W. B., and Fox, Carl L., physical properties of morpholine-water solutions, I, 436.
- Friedman, H. L. See Renshaw, R. R.
- Friedman, L., Klemm, K., and Thompson, F. K., combination of gelatin with acids and bases, I, 113.
- Friedman, M., relation of tissue recovery and healing process to periodicity of radiation effects, III, 446.
- Hamburger, W. W., and Katz, L. N., heparin in subacute bacterial endocarditis, III, 93.
- Klein, R., and Rosenblum, P., effects of serum transfer in patients with rheumatic fever, III, 67.
- Friedman, M. H., and Friedman, G. S., relation of diet to restitution of gonadotropic hormone content of discharged rabbit pituitary, III, 577.
- Friedman, M. H. F., Recknagel, R. O., Sandweiss, D. J., and Patterson, T. L., inhibitory effect of urine extracts on gastric secretion, III, 35.
- Saltzstein, H. C., and Farbman, A. A., effect of urine from gastrectomised and duodenectomised dogs on gastric secretion, III, 500.
- Friedman, M. M. See Polatin, P.
- Friedman, N. B., insulin hypoglycaemia and glycolytic hepatomegaly in diabetes mellitus, III, 518.
- See also Gomori, G.
- Friedman, P. S. See Dannenberg, A. M.
- Friedman, S. See Selye, H.
- Friedman, T. B., and Molony, C. J., rôle of allergy in atelectasis in children, III, 635.
- Friedmann, D. See Euler, H. von.
- Friedmann, J. B., plasticity of polycrystalline solid solutions of metals, I, 20.
- Friedmann, T. E. See Andrews, W.
- Friedrich, H. See Engelhard, A.
- Friedrich, L. von, treatment of lamblia intestinalis [with acramil], III, 924.
- Friend, J. N., and Allchin, J. P., colour of celestine, I, 47. Blue rock-salt, I, 238.
- and Hale, R. W., solubilities of lanthanum, praseodymium, and neodymium chlorides, I, 291.
- and Hall, D. A., determination of praseodymium and neodymium in solution from their absorption spectra, I, 232.
- Friend, J. N., Vallance, R. H., and Challis, H. J. G., phosphate separation in qualitative analysis, I, 371.
- See also Kingsbury, A. W. G.
- Fries, B. A., Changus, G. W., and Chaikoff, I. L., radioactive phosphorus as indicator of phospholipin metabolism. IX. Influence of age on the phospholipin metabolism and comparative phospholipin activity of various parts of the central nervous system of the rat, III, 240.
- Fries, J. H., and Zizmor, J., gastrointestinal allergy in children; clinical reactions resulting from ingestion of foods, III, 444.
- Fries, K., and Brandes, E., quinonemethides, II, 46.
- Friesen, A. P., optical constants of liquid thallium, I, 352. Lorentz-Lorenz constant for paraffin oil between 30° and 115°, I, 352. Optical constants and intermetallic compounds, I, 355.
- Friley, M., diffraction spectrography of the γ -radiations of the actinium family, I, 140.
- Frimberger, F., technique of Takata reaction, III, 187.
- Friseh, A. W., sputum studies in pneumonia: effect of sulphanilamide, III, 436.
- Frisch, D., and Eyring, H., pressure and temperature effects on the viscosity of liquids, I, 436.
- Fritz, O. See Roth, W. A.
- Fritzsche, R., electrocardiographic studies on dying patients, III, 884.
- Frivold, O. E., Hassel, O., and Hetland, E., dispersion curves of H_2 and D_2 , H_2S and D_2S in the visible, I, 16.
- Frobisher, M., jun., susceptibility of chicks to diphtheria bacilli and toxin, III, 869.
- Frocht, M. See McKinney, J. McD.
- Fröhlich, E., action of sex hormones in disturbances of peripheral circulation, III, 650.
- Fröhlich, H., Heitler, W., and Kahn, B., deviation from the Coulomb law for a proton, I, 5. Photodisintegration of the deuteron in the meson theory, I, 143.
- and Nabarro, F. R. N., orientation of nuclear spins in metals, I, 336.
- Fröhlich, K., blood pressure in infancy, III, 885.
- Fröhlich, R., action of albucid in epidemic meningitis, III, 437.
- Frolich, P. K. See Thomas, R. M.
- Frolova, V. N. See Kononov, I. N.
- Fromageot, C., and Heitz, P., determination of valine and leucine in presence of other amino-acids, II, 269.
- and Tehang, J. L., carotenoid pigments of *Rhodotorula sarniei*, III, 449. Synthesis of the pigments, III, 449.
- Wookey, E., and Chaix, P., anaerobic degradation of L-cysteine by desmiphurase, an enzyme contained in liver, III, 347.
- See also Chaix, P., and Desnuelle, P.
- Froman, D. K., and McFarlane, W. D., photo-electric colorimeter-fluorimeter, I, 420.
- See also Josephson, V., and Swales, W. E.
- Froment, R. See Hermann, H.
- Fromer, M. F. See Freyberg, R. H.
- Fromm, J., high blood pressure in diphtheria, III, 885.
- Fronza, F. M., and Marelo, A. S., physiology of poultry. II. Sexual differentiation in organs of viscera of male and female Los Baños Cantonese fowls, III, 139.

- Fronde, C., crystal habit variation in sodium fluoride, I, 150, 351. Oriented inclusions of staurolite, zircon, and garnet in muscovite; skating crystals and their significance, I, 180. Effect of dyes on crystal habit and optics of sodium and lithium fluorides, sodium and potassium chlorides, and potassium bromide and iodide, I, 199.
- Frongia, G., light of the night sky, I, 50.
- Fronimopoulos, J., effect of vitamin-A deficiency on origin of recurrent seasonal kerato-conjunctivitis allergica (serofulosa), III, 488.
- Froning, J. F., and Hennion, G. F., addition of hydroxy-compounds to acetylenic alcohols, II, 187.
- Frosch, C. J. See Fuller, C. S.
- Frost, A. V., equilibria of reactions between hydrocarbons. XII. Isomerisation of butylenes and butanes, I, 213.
See also Berenz, L. I., and Remiz, E. K.
- Frost, D. V., Elvehjem, C. A., and Hart, E. B., iron utilisation in dogs on milk diets, III, 856.
- Potter, V. R., Elvehjem, C. A., and Hart, E. B., iron and copper versus liver in treatment of hemorrhagic anemia in dogs on milk diets, III, 511.
See also Black, S.
- Frost, L., sodium diphenylhydantoinate in treatment of severe cases of epilepsy, III, 24.
- Frost, T. T. See Haam, E. von.
- Frostig, J. P., and Spies, T. D., initial nervous syndrome of pellagra and associated deficiency diseases, III, 429.
See also Himwich, H. E., and Lewy, F. H.
- Frühart, L., antidiuretic pituitary hormone after mercuric chloride poisoning, III, 496.
- Frumkin, A., study of the double layer at the metal-solution interface by electrokinetic and electrochemical methods, I, 110. Mechanism of hydrogen electrode process, I, 414.
See also Bruns, B., and Jofa, S.
- Frumkin, A. N. See Vorsina, M. A.
- Frumusan, P. See Lian, C.
- Frush, H. L. See Isbell, H. S.
- Fruton, J. S., and Bergmann, M., activation of papain, III, 448.
- Irving, G. W., jun., and Bergmann, M., preparation of *d*(-)-glutamic acid from *dl*-glutamic acid by enzymic resolution, II, 246. Specificity of proteolytic enzymes from tumours, III, 424.
- Fry, A. S. See Fisher, R. A.
- Fry, E. G. See Long, C. N. H.
- Fry, E. M. See Fieser, L. F.
- Fry, E. M., jun., and Baldeschwieler, E. L., accurate timing equipment for viscosity determinations, I, 395.
- Fry, M. J. See Rathmell, T. K.
- Frye, J. R. See Russell, A.
- Frye, W. W., and Meleney, H. E., liver extract as substitute for serum in culture medium for *Endameba histolytica*, III, 74.
- Fryer, O. G., radioactivity of air, water, cave, and soil gases, I, 337.
- Fuchs, F. See Fine, J.
- Fuchs, J., general relation between the elementary charge and the quantum of energy, I, 191.
- Fuchs, K., the statistical method in nuclear theory, I, 191.
See also Born, M.
- Fuchs, M. M. See Burkser, F. S.
- Fucks, W., and Schumacher, G., variation of breakdown potential in hydrogen, I, 382.
- Fuda, M. See Katsurai, T.
- Füchtbauer, C., and Häusler, G., effect of density on displacement of high series lines of alkali metals by foreign gases, I, 50.
- Fürth, R., relation between breaking and melting, I, 288. Theory of holes in liquids, I, 436.
- Fues, E., propagation surface of scalar waves in a lattice-like medium, I, 100.
- Fugo, N. W. See Haterius, H. O.
- Fuhs, H., skin injuries by incendiary bombs and poison gases, III, 606.
- Fujii, K., and Osumi, S., saponins and sterols. XIII. Ursolic acid. XIV. Anhydro-compounds of ursolic acid. XV. Dry distillation of ursolic acid with selenium, and its constitution. XVI. Conversion of ursolic acid into uvaol, II, 99, 221, 229, 329.
See also Mayeda, S., and Wada, M.
- Fujikawa, F., antiseptic action of the phenols, phenolic acids, and their esters, comprising resins. III. Compounds of the hæmatommic acid group and of potassium salazate. IV. Divarin group. V. Olivetonic acid series, from soya extract, III, 269.
and Asami, K., constituents of *Veronica* spp. II, III, 831.
and Ina, M., constituents of *Geranium onolt*, Franch. et Sav., III, 548.
and Inoue, S., coumarins, II, 330.
- Kudo, Y., and Sengoku, H., constituents of *Veronica* spp., III, 548.
- Fujimi, K. See Ito, Ryoji.
- Fujimoto, S. See Yaoi, H.
- Fujimura, K., ascorbic acid. II. Relationship between glycolysis, ascorbic acid, and glutathione in defibrinated blood of healthy rabbits, III, 751.
- Fujino, K., and Arai, Y., manufacture of fructose. I. Decomposition of fructose with acid; determination of reaction constant at high temperature, II, 206.
- Fujisawa, M. See Sugawara, S.
- Fujise, S., and Tiba, K., action of selenium on indoles, quinoline, and their hydrogenated derivatives, II, 106.
- Fujita, H., micro-determination of blood-phosphatase, III, 11.
- Fujita, I., action of secacornin, pituitrin, and acetylcholine on uterus and tube, III, 679.
- Fujiwara, T. See Kishi, S., and Nakahara, W.
- Fukuda, S., increase in optical rotation of *d*-lactic acid, II, 266. Detection and determination of picrolonic acid, II, 294. Constituents of snail eggs, III, 373. Embryonic chemistry of snakes, III, 373.
- Fukuhara, H., central effect of adrenaline on intestinal peristalsis, III, 249.
- Fukuhara, N. See Calfee, J. D., and Young, DeW. S.
- Fukui, G., and Chikamori, T., constituents of resins. XIV. Crystalline constituents of *Cryptomeria* resin. II, II, 100.
- Fukui, K., influence of veronal, sodium veronal, luminal, and sodium luminal on cultures of iris epithelium, III, 5.
- Fukukei, I., and Shinkawa, T., cancer of right leg from burns of skin, III, 509.
- Fukumoto, T., pharmacological action of bis-ethylxanthogen, III, 924.
- Fukunaga, E. T., and Dean, L. A., suction filtration apparatus for sampling filtrates under constant pressure, I, 395.
- Fukunaga, S., action of sodium alkoxides on ethyl α -diethoxysuccinate. I. Isomerisation of ethyl α -diethoxysuccinate into ethyl α -diethoxysuccinate. II. Mechanism of formation of ethyl α -diethoxysuccinate from ethyl disodium tartrate, II, 243, 266.
- Fukuroi, T. See Aoyama, S.
- Fukushima, M. See Ishida, Y.
- Fuller, A. T., Colebrook, L., and Maxted, W. E., action of sulphanilamide, III, 756.
and James, G. V., sulphanilamide in wound infections, III, 599.
See also James, G. V.
- Fuller, C. C. See Bercovitz, Z.
- Fuller, C. S., Frosch, C. J., and Pape, N. R., X-ray examination of polyisobutylene, I, 403.
- Fuller, H. Q., Phillips, L. W., and Almy, G. M., fluorescence of diacetyl: quantum yield and quenching by iodine, I, 8.
See also Almy, G. M.
- Fuller, R. E. See Goodspeed, G. E.
- Fuller, W. H. See Vandecaveye, S. C.
- Fulton, C. C., precipitating agents for alkaloids and amines, II, 264.
- Fulton, J. F. See Bender, M. B., Catchpole, H. R., Inay, M., and Sahs, A. L.
- Fumi, C., effect of X-radiation on blood-sugar in hypertrophy of thymus gland in infants, III, 883.
- Fundler, B. M. See Salkind, J. S.
- Fundner, H. J. See Dungen, M. von.
- Funk, C., and Funk, I. C., action of hormones as dietary constituents, III, 320.
- Funk, G., light-bleaching of dried leaves, III, 547.
- Funk, I. C. See Funk, C.
- Fuoss, R. M. See McIntosh, R. L., and Mead, D. J.
- Furman, N. H. See Flagg, J. F.
- Furnée, J. M. See Böseken, J.
- Furniss, H. D., modified Westergren sedimentation tube, III, 557.
- Furnival, G. M., silver-pitchblende deposit at Contact Lake, Great Bear Lake area, Canada, I, 181.
- Furry, W. H., transition probabilities in double β -disintegration, I, 92.
See also Jones, R. C.
- Furth, J., experimental leukemia, III, 276.
and Kabat, E. A., association of heterogenic antigen with a material in normal and tumour tissues sedimentable at high speeds, III, 747.
See also Kabat, E. A., and Schweitzer, M. D.
- Furth, O. B., Barnes, W. A., and Brower, A. B., studies on resistance to transmissible leukemia in mice by means of parabiosis, III, 377.
- Fuson, N., Randall, H. M., and Dennison, D. M., far infra-red absorption spectrum and rotational structure of heavy water vapour molecule, I, 56.
- Fuson, R. C., and Cooke, H. G., jun., synthesis of carbalkoxy stilbenes, II, 278.
- McBurney, C. H., and Holland, W. E., α -diacetylene glycols, II, 93.
and McKeever, C. H., chloromethylation of aryl ketones, II, 223. Condensation of paraformaldehyde with acetomesitylene, II, 279. Trimerisation of mesityl vinyl ketone, II, 348.
- McKeever, C. H., and Corse, J., enediols. III. α -Dimesitylacetylene glycol, II, 169.

- Fuson, R. C., and Robinson, J. W., jun., α -dibromo- α -dipivalylbutane [δ -dibromo- γ -diketo- β - β -tetramethyl-n-decane], II, 154.
- Scott, S. L., Horning, E. C., and McKeever, C. H., enediols. IV. *cis-trans* Isomerism, II, 343.
- Fussell, L., jun., exhaust valve for pneumatic cloud chambers, I, 41.
- Futcher, P. H., glomerular nephritis following skin infections, III, 744.
- See also Farr, L. E.
- Fnzii. See under Fujii.
- Fuzikawa. See under Fujikawa.

G.

- Gaarenstroom, J. H., action of diethylstilbæstrol on sex determination, III, 129. Effect of pregnancy urine on seminiferous tubules in rat, III, 648.
- See also Ruitinga, P.
- Gabel, J. O., and Grinberg, F. L., synthesis of sulphur-containing chemotherapeutic products. I. *p*-Nitrophenyl *p*-aminophenyl sulphoxide and sulphone, II, 216.
- and Schpanion, A. L., synthesis of sulphur-containing chemotherapeutic products. II. *p*-Nitrophenyl *p*-acetamidophenyl sulphide, II, 216.
- Gabler, R. See Weygand, C.
- Gabriel, G. See Mondain-Monval, P.
- Gabriel, J. E. See Hartman, F. A.
- Gaddis, A. M. See Butz, L. W.
- Gaddy, V. L. See Wiebe, R.
- Gadolín, H. R., pathology and clinical signs of so-called zygomatico-mastoiditis, III, 119.
- Gaehler, O. H., and Zimmerman, W. J., effects of anterior pituitary preparation on metabolism in phloridzin diabetes, III, 493.
- Gärtner, H., X-ray studies of fine structure in dust-affected lungs, III, 865. Oxidase and peroxidase reaction in diagnosis of meningococci, III, 869.
- Gaertner, E. R., and Pardue, L. A., γ -radiation from nitrogen bombarded by deuterons, I, 186.
- Gafafer, W. M., disabling morbidity among industrial workers, third quarter and the first 9 months of 1939, III, 341. Course of disabling morbidity among industrial workers, 1921—38, III, 763. Disabling morbidity among male and female industrial workers during 1938 and 1939, and among males during first quarter of 1940, with an inquiry into occurrence of multiple attacks of disabling sickness and injuries, 1939, III, 929.
- and Sitgreaves, R., disabling morbidity and mortality from cancer among male employees of an oil-refining company with reference to age, site, and duration, 1933—1938, III, 856.
- Gaffron, H., oxyhydrogen reaction in green algae, and reduction of carbon dioxide in the dark, III, 776.
- Gagarin, J. See Abramson, H. A.
- Gagge, A. P. See Winslow, C. E. A.
- Gagné, R. M., and Graham, C. H., effect of an emotional state on initial stages of acquisition in a conditioned operant response, III, 722.
- Gagnon, P. E., and Hudon, R., β -phenyl- β -9-anthronylpropionic acids and their derivatives, II, 129.
- Gagnon, P. E., and Hudon, R., Cantin, J., and Ganas, J., 3:3-diphenyl-1-hydrindone and 3:3-diphenylindane-1:2-dione; synthesis of *o*-benzhydrylbenzoylformic acid, II, 134.
- Gahlen, W., determination of aneurin, III, 673.
- Gaida, M., reserve capillaries of lung, III, 478.
- Gailey, W. W., transient myopia from sulphanilamide, III, 399.
- Gaillard, P. J., Overbeek, G. A., and Yam, T. H., action of anti-anemic preparations on bone marrow, III, 467.
- Gaines, J. A. See Geist, S. H.
- Gaines, W. L., graphic estimation of milk-protein and milk energy, III, 314. Live weight and milk-energy yield in Holstein cows, III, 746.
- Gais, E. S., and Abrahamson, R. H., herpes zoster and its visceral manifestations, III, 199.
- Gaisford, W. F., treatment of lobar pneumonia with M. & B. 693, III, 330.
- Gajatto, S., pharmacology of monosodium phosphate, III, 65. Determination of small amounts of potassium chlorate in urine, III, 314. Excitatory activity of small doses of quinine dihydrochloride on isolated toad's heart, III, 474. Antagonism tannic acid-quinine dihydrochloride in isolated toad's heart, III, 601.
- Gajdos, A., and Hochwald, A., porphyrinuria in anaphylactic and histamine shock in the rabbit, III, 250.
- and Panayotopoulos, effect of liver damage on water absorption from peritoneum, III, 417.
- Gajewski, F. J. See Renshaw, R. R.
- Gajewski, Z. See Rolinski, J.
- Gal, F., carcinoma of uterus and ovarian activity, III, 509.
- Galachova, V. N., blood-glycogen, III, 562.
- Galambos, R. See Therman, P. O.
- Galamini, A. See Bocciarelli, D.
- Galat, A., and Eliot, (Miss) G., preparation of primary amines, II, 69.
- Galavics, F., measurement of gyromagnetic effect of manganese-antimony and iron-selenium alloys, I, 498.
- Galbraith, F. W., identification of the commoner tellurides, I, 380.
- Galdston, M. See Sealock, R. R.
- Gale, E. F., production of amines by bacteria. I. Decarboxylation of amino-acids by *B. coli*, III, 452.
- Galewski, S., and Stannus, H. S., M. & B. 693 in staphylococcal septicæmia, III, 242.
- Galinowski, Z., fate of bone marrow cells after infection *in vitro*. I. Healthy subjects. II. In disease, III, 5.
- Galitzki, V., fluorite in ore-bearing regions of the Kara-Tau range, I, 304.
- Gall, E. A. See Mallory, T. B.
- Gall, M. B. See Diamond, J. S.
- Gallagher, T. F. See Butenandt, A.
- Gallais, F., and Voigt, D., magneto-optic study of neutralisation, I, 73. Constitution of thiocyanic acid, I, 148.
- Gallardo, E., and Thompson, R., effect of intravenous injection of non-specific proteins on experimental corneal ulcers, III, 396.
- Gallardo, J. B. S., progestational effect of deoxycorticosterone, III, 809.
- See also Álvarez, F. G.
- Galle, R. R., and Nikolaev, A. G., determination of constitutional groups of humic acids. II, II, 32.
- Gallé, T. See Dzsinich, A.
- Galli, T., Bussa, D., and Montolivo, G., antidotal effect of ascorbic acid to digitalis glucosides. I. and II., III, 62.
- Gallien, L., histological process of ovarian atresia in hypophysectomised frog, III, 30. Utilisation of oily solutions of sex hormones by batrachian tadpoles, III, 306.
- Galligar, G. C., correlation between growth of excised root tips and types of food stored in seed, III, 940.
- Gallimore, E. J. See Barber, H. H.
- Gallot-Queuille, S., respiratory changes in normal adult guinea-pigs and in animals deprived of vitamin-C, III, 594.
- Gallotti, M. See Pollacci, G.
- Gallup, W. D., and Norris, L. C., assimilation and storage of manganese in the developing embryo and growing chick, III, 49. Amount of manganese required to prevent perosis in the chick, III, 49. Effect of a deficiency of manganese in diet of the hen, III, 49.
- Gambigliani-Zoccoli, A., Giacchero, R., Zambelli, E., and Reschia, C., lactic acid and failure of circulation, III, 189.
- Gamble, D. L., liquid latex as injection mass for blood vessels, III, 372.
- and Barnett, C. E., infra-red absorption spectra of drying oils, I, 194.
- Gamble, E. L., and Gilmont, P., preparation and properties of diborane diphosphine, I, 264.
- Gilmont, P., and Stiff, J. F., reaction of boron fluoride with aluminium chloride or bromide, I, 328.
- Gamble, J. A., Ellis, N. R., and Besley, A. K., composition and properties of goat's as compared with cow's milk, III, 504.
- Gamble, R. C., keratomalacia and cystic fibrosis of pancreas, III, 638.
- Gamow, G., evolution of the stars, I, 343.
- Ganapathi, K., configuration of the C_{12} hydroxyl group in sterols precipitable by digitonin, II, 14. Configurations of the C_{12} and C_{13} hydroxyl groups in gitenin and digitonin, II, 229. Chemotherapy of bacterial infections. II. Synthesis of sulphanilamide derivatives and relation of chemical constitution to chemotherapeutic action, II, 249. Action of sulphanilamide derivatives in streptococcal and pneumococcal infections in mice, III, 822.
- and Nandi, B. K., synthesis of heterocyclic derivatives of sulphanilamide, II, 261. Heterocyclic and other derivatives of sulphanilamide, II, 261.
- Ganas, J. See Gagnon, P. E.
- Ganassini, E., effect of vitamin-B₁ [on gastric juice], III, 35.
- Gandini, A., chloro- and bromo-derivatives of pinane, II, 283.
- Gangitano, L., blood-polypeptides during experimental traumatic shock, III, 883.
- See also Giangrasso, G.
- Gangl, P., and Lucksch, F., vitamin-C and epidemic encephalitis, III, 637.
- Ganguli, N. See Krishnan, K. S.
- Ganguly, H. D. See Bagchi, K. N.
- Gant, D. H. T., fission of uranium under deuterium bombardment, I, 53.
- Gantt, W. H. See Katzenbogen, S., and Löwenbach, H.
- Gantz, G. M., and Walters, W. D., thermal decomposition of acetone catalysed by iodine, I, 261.

- Ganz, E., propagation of heat in liquid He II, I, 105.
- Gaponenkov, T. K., reaction of pectins with acids, I, 321. Structure of pectin substances, II, 153.
- Garber, E. S. See Felson, H., Schiff, L., and Stevens, R. J.
- Garcia, F., pharmacological action of quaternary alkaloids of *Phacanthus ebracteolatus* (Presl.), Merrill (kalimatas), III, 822.
- Gard, S., and Eriksson, E. J., *B. coli* strains with *Salmonella* H antigens, III, 454. See also Kling, C.
- Gardiner, S. H. See Bethell, F. H.
- Gardner, C. See Clemo, G. R.
- Gardner, C. E., instrument to measure arterial pulsation in digits, III, 386.
- Gardner, E., decrease in human neurones with age, III, 797.
- Gardner, J. H. See Bickley, E. A., and Joseph, L.
- Gardner, J. W., Mountain, G. E., and Hines, E. A., jun., relationship of migraine to hypertension and hypertension headaches, III, 718.
- Gardner, L. U., pathology and X-ray signs of pneumoconiosis, III, 445.
- Durkan, T. M., Brumfiel, D. M., and Sampson, H. L., atmospheric dusts in cement plants and their effects on the lungs of employees, III, 67.
- Gardner, R. See Robertson, D. W.
- Gardner, R. E. See Hyde, R. R.
- Gardner, T. S. See Wolfrom, M. L.
- Gardner, W. J., Nosik, W. A., and Brubaker, R. E., pentothal sodium anaesthesia in pneumo-encephalography, III, 891.
- and Turner, O., bilateral acoustic neurofibromas; clinical and pathological data on hereditary deafness and Recklinghausen's disease, III, 804. See also Rasmussen, A. T.
- Gardner, W. U., and Allen, E., malignant and non-malignant uterine and vaginal lesions in mice receiving oestrogens and androgens simultaneously, III, 735.
- Kirschbaum, A., and Strong, L. C., lymphoid tumours in mice receiving oestrogens, III, 423.
- and Strong, L. C., strain-limited development of tumours of pituitary gland in mice receiving oestrogens, III, 899.
- Strong, L. C., and Smith, G. M., mammary glands of mature female mice of strains varying in susceptibility to spontaneous tumour development, III, 227.
- and Van Heuverswyn, J., inhibition of pelvic changes of pregnancy in mice by testosterone propionate, III, 645. See also Hooker, C. W., Kirschbaum, A., Pfeiffer, C. A., Van Heuverswyn, J., and Wentworth, J. H.
- Gardosi, D., histochemistry of lipins of amphibian pancreas, III, 280.
- Gargiulo, A., Moisset de Espanés, E., and Pezzi, A. R., blood groups in medical students in Córdoba, III, 284.
- Garland, F. M. See Griswold, J.
- Garland, H., neurological complications of pregnancy, III, 20.
- Garlough, F. E. See Ward, J. C.
- Garner, C. S. See Osborne, D. W.
- Garner, W. E. See Cooper, J. A.
- Garrahan, J. P., and Thomas, G. F., calcium fractions in infantile spasmodophilia [in e.s.f.], III, 844.
- Garrard, E. H. See Castell, C. H.
- Garrett, A. B., and Heiks, R., tube for nitrogen purification, I, 377.
- Hogge, E., and Heiks, R., erratic potentials of [platinum] electrodes sealed in glass tubing, I, 375.
- Holmes, O., and Laube, A., solubility of arsenious oxide in dilute solutions of hydrochloric acid and sodium hydroxide; character of the ions of trivalent arsenic; evidence for polymerisation of arsenious acid, I, 412.
- Garrett, O. F., and Overman, O. R., mineral composition of colostrum milk, III, 314.
- Garrett, O. W. See Miller, N. J.
- Garrett, S. D., utilisation of nitrogen by *Ophiobolus graminis*, III, 351.
- Garrison, W. See Rollefson, G. K.
- Garrod, L. P., antiseptics and wounds, III, 758.
- Garry, R. C., and Smith, I. A., urinary excretion of intravenously administered mandelic acid by cats, III, 519. See also Andrew, B. L., and Davidson, J. N.
- Garssen, J. E. See Aten, A. H. W.
- Garton, W. R. S., photoconducting alkali halide crystals and their use as spectral filters, I, 374.
- Garven, H. S. D., dyspnoea, III, 887.
- Garver, W. P., transference of reagins in blood transfusions, III, 339.
- Garvin, C. F., functional aortic insufficiency, III, 711. Peripheral neuropathy and toxic psychosis with convulsions due to sulphamethylthiazole, III, 921.
- Gas, L., effect of hypophysectomy on nitrogenous constituents of blood of dogs: influence of fasting and of protein-rich diet, III, 641.
- Gasnier, A., nutrition of the domesticated rabbit; course of ingestion; efficiency of nutrition, III, 46.
- Gaspart, R. See Errera, J.
- Gasser, H. S., the synapse; axons as samples of nervous tissue, III, 21. and Grundfest, H., axon diameters in relation to spike dimensions and conduction velocity in mammalian A fibres, III, 917.
- Gassmann, A. G. See Hartman, R. J.
- Gassner, F. X., iodine [determination] apparatus, I, 236.
- Gast, P. See Loughridge, D. H.
- Gatenby, J. B., and Aykroyd, O. E., cytology of human uterine gland cell, III, 127. Morphology of human sperm and egg, III, 552.
- Gates, M. D., jun. See Fieser, L. F.
- Gates, O. See Warren, S.
- Gates, R. M. See Emmons, R. C.
- Gates, R. R., nucleoli, satellites, and sex chromosomes, III, 87. Relation of nucleolus to secondary constrictions, III, 555.
- Gatet, L., reducing power of fruit juices during maturation, III, 53.
- Gatewood, L. C., carbonate excretion in urine as indication of alkalosis, III, 138.
- Gattig, W., pre-operative treatment with iodine in exophthalmic goitre, III, 894.
- Gatty, O., and Schulman, J. H., thin protein membranes, I, 70. See also Carter, G. S., and Dean, R. B.
- Gatzanuk, M. D., variations of lipocytic coefficient with age, III, 149.
- Gauch, H., responses of bean plants to calcium deficiency, III, 944.
- Gandin, O., influence of artichoke extract on antitoxic function of liver in guinea-pigs, III, 65.
- Gaudin, M. L. See Sagastume, C. A.
- Gault, H. [with Steckl, J., and Skoda, J.], cyclanic polyalcohols, II, 179. and Daltroff, L., norcamphoric acid, II, 130.
- Palfray, L., and Hsu, P. T., pyrolysis of higher fatty alcohols, II, 114.
- Gaumé, A., and Arthus, A., biochemical application of oxidation-reduction reactions, III, 620.
- Gaunt, R., Remington, J. W., and Edelman, A., effect of progesterone and other hormones on liver-glycogen, III, 57. See also Eversole, W. J.
- Gauss, C. J., biological therapy in gynaecology and obstetrics, III, 651.
- Gautheret, R., effect of different substances on growth of carrot tissue cultures, III, 366. Budding of cambium of *Ulmus campestris* grown *in vitro*, III, 777.
- Gautier, C., physiology of [cutaneous] localisation, III, 569.
- Gautier, T. N., and Ruark, A. E., composition of mixed vapours in the cloud chamber, I, 320.
- Gavaudan, N. See Gavaudan, P.
- Gavaudan, P., and Gavaudan, N., action of apiole on mitosis and cytodieresis in phanerogams, III, 272. Rôle of the chemical constitution and physical properties in the action of cyclic hydrocarbon derivatives on karyokinesis, cytodieresis, and morphogenesis of plants, III, 547. Effect of isomerides of parsley apiole on plant mitosis and cytodieresis, III, 693.
- Gavaudan, N., and Durand, J. F., changes in mitosis in plants due to cyclic hydrocarbons and their derivatives, III, 365.
- Gavin, G., and McHenry, E. W., B-vitamins and fat metabolism. III. Effects of vitamin-B₆ on liver and body fat, III, 234. See also Longenecker, H. E., and McHenry, E. W.
- Gavrilescu, N., and Ionesco, N., earthworm as sensitive detector of acetylcholine, III, 550.
- Gavrilov, K. I., cicatrization layer before the fall of leaves, III, 82. Dynamics of group-B growth-substances in plants, III, 82.
- Gavrilov, N. I., and Balabucha-Popzova, V. S., hydrolysis of gelatin by enzymes and by heating under pressure. V., III, 163.
- Gay, F. P., Clark, A. E., Street, J. A., and Miles, D. W., action of sulphanilamide on streptococcus, III, 246.
- Gay, L., Méjean, P., and Brunel, A., interfacial tension between a benzene solution of palmitic acid and an aqueous solution of mono-, di-, or tri-sodium orthophosphate, I, 253. and Raymond, L., interfacial tension between a benzene solution of palmitic acid and an aqueous solution of ammonia; tensiometric study of neutralisation of ammonia by hydrochloric acid, I, 253.
- Gaydon, A. G., and Pearce, R. W. B., spectrum of rubidium hydride, RbH. I. Analysis. II. Potential curves, wave functions, and intensity distribution, I, 55.
- Gayler, M. L. V., microscopic analysis of intermediate phases in age-hardening alloys, I, 67.

- Gazzi, V., spectrographic determination of caesium, rubidium, potassium, and lithium by the flame method, I, 81.
- Geake, A., electrode equations for analysis of redox titration curves, I, 76.
- and Lemon, J. T., semiquinone formation by anthraquinone and simple derivatives, II, 49.
- Gear, J. H. S. See Osborn, T. W. B.
- Gebauer, H. See Vierthaler, R. W.
- Gebert, F. See Günther, P.
- Gebhardt, F., influence of Eck's fistula on liver function and bile pigment metabolism, III, 311.
- Gebhardt, H., and Metzger, F., effect of sympathomimetic substances on excitability of frog's ventricle, III, 13.
- Gee, G. N., detection of urea in urine stains on carpets, III, 369.
- Gee, K. W. See Dobbins, N. E.
- Geer, H. See Yudkin, A. M.
- Geer, W. A. See Dragstedt, L. R.
- Geerling, M. C. See De Fremery, P.
- Geesink, A., and Den Hartog Jager, W. A., influence of mescaline and dimethoxyphenylethylamine on arterial pressure, III, 522.
- Geeslin, L. E. See Sydenstricker, V. P.
- Geffers, H., fat-forming process in fungi of the genus *Oospora wallroth* (cm. Sacc.), III, 450.
- Gegerson, H. See Kurzkrok, R.
- Gehr, E., is the purification of bread cereals from corncockle seed responsible for disappearance of the leprosy of the middle ages? III, 443.
- Geier, R. See Bockemüller, W.
- Geiger, A., glycolysis in cell-free brain extracts, III, 536.
- See also Karrer, P.
- Geiger, A. J., use and limitations of electrocardiography in diagnosis of acute coronary occlusion, III, 98.
- Geiger, E., bioassay of senna leaves and fluid-extract of senna, U.S.P. XI., III, 601.
- Geiger, J. C., Rodin, F. H., and Chase, B. A., problem of hard-of-hearing school child, III, 27.
- Geiger, W. B., jun., and Anderson, R. J., chemistry of lipins of tubercle bacilli. LVIII. Firmly bound lipins of so-called leprosy bacillus, III, 170.
- Geigle, W. F. See Briggs, T. R.
- Geiling, E. M. K., Vos, B. J., jun., and Oldham, F. E., pharmacology and anatomy of hypophysis of porpoise, III, 847.
- See also Eichelberger, L., Jensen, Hans, Last, J. H., and Oldham, F. K.
- Geinitz, H., structural viscosity in various kinds of potato starch products, I, 357.
- Geissendörfer, H., surgical treatment of arterial hypertension, III, 192.
- Geissler, H., panmyelophthisis and myeloblastic leukaemia, III, 8.
- and Wurm, H., tuberculosis and myeloblastic reaction, III, 790.
- Geissman, T. A., interaction of *o*-hydroxybenzhydriylacetophenone and *o*-hydroxybenzylidenediacetophenone with magnesium phenyl bromide, II, 313.
- and Tess, R. W., synthesis of phenanthrene derivatives. I. Phenanthrene-9:10-dicarboxylic anhydride and -9-carboxylic acid, II, 174.
- Geist, G. See Thaler, H.
- Geist, S. H., Gaines, J. A., and Salmon, U. J., inhibitory action of testosterone propionate on human ovary, III, 848.
- Geist, S. H., Mintz, M., and Salmon, U. J., effect of testosterone propionate on Fallopian tube peristalsis, III, 130.
- Salmon, U. J., Gaines, J. A., and Walter, R. I., action of testosterone propionate in women, III, 734.
- Walter, R. I., and Salmon, U. J., local tissue reaction to implantation of crystals and pellets of oestrogenic hormone, III, 735.
- See also Salmon, U. J., and Walter, R. I.
- Gelbert, A. See Briner, E.
- Geller, W., system iron-cobalt-antimony, I, 156. Electrolytic deposition of iron from silicate melts, I, 367.
- Gellhorn, E., Darrow, C. W., and Yesinick, L., effect of adrenaline on convulsions, III, 297. Effect of variation of blood pressure on autonomic nervous system, III, 570.
- and Packer, A., influence of anoxia on glycogenolytic action of adrenaline, III, 125. Comparison of influence of anoxia and asphyxia on blood sugar, III, 295. Interaction of hypoglycaemia and anoxia, III, 883.
- and Storm, L. F. M., influence of hyperventilation and of variations of oxygen and carbon dioxide tension in inspired air on galvanic nystagmus, III, 120.
- See also Darrow, C. W., Kraines, S. H., and Steck, J. E.
- Gelman, A., theory of complex compounds, I, 149. Compounds of platinum [salts] with ethylenic hydrocarbons, I, 267. Co-ordination stability of ethylene hydrocarbons, II, 209.
- and Litvak, I. B., ethylene compounds of platinum nitrochlorides, I, 267.
- and Maximova, Z. P., nitrosyl compounds of platinum, I, 129.
- Gemant, A., electrochemical potential differences at the boundary copper-insulating liquids, I, 442.
- Gemmill, C. L., effect of insulin on glycogen content of isolated muscles, III, 713. Effect of stimulation on fat and carbohydrate content of gastrocnemius muscle in phloridzinised rat, III, 714.
- Gey, G. O., and Austrian, R., metabolism of tissue cultures of Walker rat sarcoma 319, III, 671.
- Gendel, S. See Fine, J.
- Genet, L., ocular insertion of the muscle obliquus sup., III, 203.
- Genevois, L., and Cayrol, P., blockage and transfer of reducing hydrogen. I. Reducing hydrogen of dichlorophenol-indophenol, III, 53.
- Genevray, J., dissociation of the cholera vibrio under the action of chlorine, III, 357. Cholera vibrios from smooth and rough colonies obtained by the action of chlorine or phenol, III, 455. Dissociation of the cholera vibrio by phenol, III, 455.
- Gengerelli, J. A. See Ziskind, E.
- Gengradom, S. See Howard, E.
- Genin, L. L. See Prianschnikov, A. A.
- Genkina, R. I. See Poljakov, M. V.
- Gennari, G., effect of derivatives of benzenesulphonic acid on blood pressure and respiration, III, 59. Effect of various diets on resistance of *Mus musculus* to arsenobenzene poisoning, III, 65.
- Gennis, J. See Jolliffe, N.
- Gent, N. L. See Bartholomew, R. J.
- Genther, I. See Wang, C. C.
- Gentola, G., recrystallisation of cellulose - and its derivatives, II, 207.
- George, A. W., and Leonard, E. D., X-ray study of lungs of workmen in asbestos industry, covering period of ten years, III, 529.
- George, K. See Glaubiger, A.
- George, W. C., comparative study of blood of tunicates, III, 627.
- Georgesu, R. I., azomethine bridge, II, 174.
- See also Ludwig, A.
- Georgiades, resorption granulomas of eyelid and conjunctiva, III, 202.
- Gérard, P. See Cordier, R.
- Gerard, R. W. See Sugar, O., and Tokaji, E.
- Gerasimova, H. See Navaschin, M. S.
- Gerasimovski, V. I., lovozerite, a new mineral, I, 237.
- Gerber, A. See Epstein, B. S.
- Gerber, L. P. See Neilson, E. K.
- Gerber, M. I. See Blat, E. I.
- Gerbi, C., Rubenstein, B. B., and Goldblatt, H., experimental hypertension. X. Oxygen consumption of ischaemic kidney, III, 192.
- Gerdjikoff, I., influence of vitamin-C on blood in malaria, III, 788.
- Gerebtzoff, M. A., central pathways of sensation and taste and their thalamic terminations, III, 484. Cortical projection of labyrinth. I. Effects of stimulation of labyrinth on electrical activity of cerebral cortex, III, 576.
- See also D'Hollander, F.
- Gergs, K. W. See Enders, C.
- Gerjuoy, E., angular distribution in the reaction ^{19}F (p, α), I, 426.
- Gerling, E. K., part taken by close packing of crystals in diffusion of helium, I, 48. Heat of diffusion of helium as criterion of suitability of minerals for estimation of age by the helium method, I, 178.
- German, W. J., and Taffel, M., surgical production of collateral intracranial circulation, III, 100.
- German, W. L., and Brandon, T. W., ionisation in non-aqueous solvents. III. Formation of sulphides in methyl and in ethyl alcohol, I, 412.
- German, W. M., lupoid-sarcoid reaction induced by foreign body (silica), III, 605.
- Germann, F. E. E., and Gibson, C. L., reactions of the leucocyanides of the triphenylmethane dyes. I. Mechanism of dark reaction following photolysis of malachite-green leucocyanide, I, 124.
- Germer, L. H., and Storks, K. H., identification of aluminium oxide hydrate films of importance in silicosis prevention, I, 69.
- Germershausen, A., preservation of biological properties of serum, especially of complement, III, 172.
- Gernez, L., limits of concentration of gonadotropic hormone in serum during normal and pathological pregnancy, III, 662.
- Gerö, L., dissociation scheme for diatomic hydride and deuteride molecules, I, 144.
- and Schmid, R., dissociation schemes for diatomic hydrides and deuterides. II., I, 281.
- Gerrard, W., esters of sulphurous, chlorosulphinic, and chlorosulphonic acids. II., I, 127.
- Gerrits, J. C., calcium and oxalic acid metabolism in patients with renal calculi, III, 41.

- Gerschenzon, S., types of mutations induced in *Drosophila* by sodium thymonucleate, III, 624.
- Gerschman, R. See Houssay, B. A.
- Gersdorff, W. A., and Smith, L. E., effect of halogenation of phenol on its toxicity to goldfish. I. Monochlorophenols. II. Monobromophenols, III, 761, 928.
- Gersh, I., and Grollman, A., relation of adrenal cortex to male reproductive system, III, 29. X-Zone of adrenal gland of mouse, III, 497.
- Gershberg, H., and Forbes, J. C., precipitation of insulin with rhodamine-B, III, 209.
- Gershenfeld, L., and Zepeda, J. E., anti-septicity tests for ointments, III, 600.
- Gershon-Cohen, J., Samson, M., and Shay, H., rabbit test for malignancy, III, 425.
- Shay, H., Paschkis, K. E., and Fels, S. S., urolithiasis in rat after injection of testosterone propionate, III, 734.
- See also Paschkis, K. E., and Shay, H.
- Gerstel, G., multiple tumours of endocrine glands in a case of acromegaly, III, 493.
- Gertler, W., albugin in treatment of gonorrhoea, III, 151.
- Gertz, G. See Bohning, A.
- Gertziken, S. D., Butzik, M. G., and Golubenko, Z. P., study of diffusion in lead-mercury and aluminium-zinc alloys by method of vacuum vaporisation, I, 67.
- and Golubenko, Z. P., diffusion of hydrogen through copper-nickel alloy, I, 67.
- Geschickter, C. F., oestrogenic mammary cancer in rat, III, 423.
- Gesell, R., forces driving respiratory act, III, 634.
- Magee, C. S., and Bricker, J. W., activity patterns of respiratory neurones and muscles, III, 566.
- Geslin, M. See Lepape, A.
- Gessi, U. See Totire-Ippoliti, P.
- Gessler, C. J., Dexter, S. O., Adams, M. A., and Taylor, F. H. L., etiologic relationship of achylia gastrica to pernicious anemia. VIII. Proteolytic activity of normal human gastric juice *in vitro*; limitations of the method in pernicious anemia, III, 182.
- Halsted, J. A., and Stetson, R. P., effect of oestrogenic substance on blood-sugar of female diabetics after menopause, III, 215.
- Gessner, F., effect of light and of ultra-violet irradiation on plant respiration, III, 942.
- Getman, F. H., trimethylcarbinol as a cryoscopic solvent, I, 406. Samuel Guthrie, I, 421.
- Getting, J. A., cloud chamber control circuit, I, 41. Galactic rotation and variation of cosmic-ray intensity, I, 341.
- Fisk, J. B., and Vogt, H. G., electrostatic generator and ion source for high-voltage research, I, 83.
- and Leighton, H. W., lining of metal capillaries with glass and application to a capillary positive ion source, I, 377.
- See also Fisk, J. B.
- Gettler, A. O., distillation capillary, I, 43. Detection, identification, and determination of methyl formate in tissues, III, 550.
- Gettner, H. See Abramson, H. A.
- Getz, C. A. See Smith, G. Frederick.
- Gey, G. O. See Gemmill, C. L.
- Geyer, E. See Rochelmeyer, H.
- Gezelins, G., anaemia in acute rheumatic fever in childhood, III, 878.
- Gharpure, D. V. See Karvé, D.
- Ghate, (Miss) I. See Limaye, D. B.
- Gheorghiu, P. See Mladoveanu, C.
- Ghidini, G. M., enterochromaffin tissue of the chick, III, 374.
- Ghigi, C., cytometric studies on parathyroids, III, 304.
- Ghigi, (Signa) E., benzpyrenes from 6-alkyl- or 6-aryl-benzanthrones, II, 161. Action of acetic anhydride on acenaphthenone, II, 179. [Attempted] synthesis of 1:9-benzanthrene, II, 187. Alkylation of *o*-hydroxyazo-compounds and reduction of ethers, II, 215.
- See also Charrier, G.
- Ghiselin, F. H. See Stewart, W. H.
- Ghose, R. See Mukerji, B.
- Ghosh, A. N. See Schwab, G. M.
- Ghosh, B., vitamin-C and toxins. IV. Effect of tetanus toxin on vitamin-C metabolism, III, 515.
- and Guha, B. C., concentration of ascorbigen from cabbage, III, 235.
- Ghosh, B. N., and Kundu, N. L., reaction between *Vipera russellii* venom and its antivenene, III, 823.
- Ghosh, D. N., and Roy, P. C., cataphoretic and electro-osmotic methods of measuring electrokinetic potential, I, 255.
- Ghosh, N. K., and Roy, B. K. D., determination of lactose in milk, III, 832.
- Ghosh, R., Pascall, D. C. S., and Todd, A. R., *Cannabis indica*. III. Synthesis of dibenzopyran derivatives, including an isomer of cannabiol, II, 355.
- Todd, A. R., and Wilkinson, S., *Cannabis indica*. IV. Synthesis of tetrahydrodibenzopyran derivatives. V. Synthesis of cannabiol, II, 355, 380.
- Ghosh, S. See Banerji, S. N.
- Ghosh, S. K. See Qudrat-i-Khuda, M.
- Ghosh, S. P., early morning variation of ionisation and true height of region E of the ionosphere, I, 425.
- See also Mitra, S. K.
- Giachalone, A., surface activity. III. and IV. Relations between surface tension, internal pressure, vapour pressure, and osmotic pressure, I, 203. Ionones and hydrones, II, 175.
- Giachero, R. See Gambigliani-Zoccoli, A.
- Giacomello, G., constitution of bile acids, II, 130.
- See also Milazzo, G., and Sartori, G.
- Giaja, J., drowsiness produced in rats by diminished barometric pressure, III, 295.
- Giangrasso, G., experimental fracture and vitamin-C. I. Vitamin-D. II. Parathyroid gland. III. Reticulo-histocytic system, III, 85.
- and Gangitano, L., experimental fracture and vitamin-C. IV. Hypervitaminosis-C, III, 85.
- Giannettasio, G. See Fiorentino, M.
- Gianniny, M. See Boerner, F.
- Gibberd, G. F., factors influencing the attitude of fetus *in utero*, III, 622.
- Gibbs, C. B. F. See Marlin, J. R.
- Gibbs, D. F. See Fertel, G. E. F.
- Gibbs, E. L., Lennox, W. G., and Gibbs, F. A., variations in carbon dioxide content of blood in epilepsy, III, 720.
- See also Gibbs, F. A., Lennox, W. G., and Nims, L. F.
- Gibbs, F. A., electro-encephalography in epilepsy, III, 394.
- Williams, Denis, and Gibbs, E. L., modification of cortical frequency spectrum by changes in carbon dioxide, blood-sugar, and oxygen, III, 485.
- See also Gibbs, E. L., and Lennox, W. G.
- Gibbs, G. E. See Entenman, C., and Montgomery, M. L.
- Gibbs, R. D., tree physiology. I. General introduction; water content of Canadian trees. II. Seasonal changes in the food reserves of field birch (*Betula populifolia*, Marsh), III, 270, 368.
- Gibbs, R. S., and Clardy, F. B., apparatus for determination of sulphur by the evolution method, I, 446.
- Gibbs, W. S., jun. See St. George, A. V.
- Gibby, C. W., and Argument, C., adsorption at interface between two fluids. III. Adsorption of dyes at a mercury-water interface, I, 291.
- Gibert, A., cosmic rays and Poisson's law, I, 385.
- Gibson, B. See Maaske, C. A.
- Gibson, C. L. See Germann, F. E. E.
- Gibson, C. S., constitution of cyano-derivatives of gold, I, 62.
- Gibson, D. T. See Coats, R. R.
- Gibson, G. G. See Roessler, H.
- Gibson, G. M. See Challenger, F.
- Gibson, J. D. See Boyd, E. M.
- Gibson, J. G., jun., Harris, A. W., and Swigert, V. W., blood volume. VIII. Macrocytic and hypochromic anemias due to chronic blood loss, haemolysis, and miscellaneous causes, and polycythemia vera, III, 9.
- See also Keeley, J. L.
- Gibson, R. E., and Loeffler, O. H., effects of pressure, temperature, and chemical composition on absorption of light by mixtures of aromatic amines and nitro-compounds, I, 344.
- Gibson, W. C., degeneration and regeneration of sympathetic synapses, III, 714.
- Giddings, G., motility of school children during sleep, III, 200.
- See also Haldi, J.
- Giebel, A. See Vollmer, H.
- Giese, A. C., ultra-violet radiation and cell division in sea-urchin sperm, III, 308.
- Mercury poisoning, III, 760.
- and Reed, E. A., variation in resistance to ultra-violet radiation with stock, species, and nutritional differences in *Paramecium*, III, 768.
- Giffes, J. W., turpentine poisoning in pigs, III, 761.
- Giffin, H. M., reversed coarctation and vasomotor gradient, III, 794.
- Gigante, D., toxicity of leukemic blood to larvae of *Bufo vulgaris*, III, 377.
- Giggs, F. A. See Nims, L. F.
- Gigon, A., liver and carbohydrate metabolism, III, 238.
- and Noveraz, M., diazotisation of serum, III, 96. Bile acid concentration in human serum, III, 883.
- Gignère, P. A., and Maass, O., solid solutions of hydrogen peroxide and water, I, 215. Heterogeneous catalytic decomposition of hydrogen peroxide in heavy water, I, 261. Vapour pressures and b.p. of binary mixtures of hydrogen peroxide and water, I, 389.
- Gilbert, A. J., and Goldman, F., effect of aminophylline, histaminase, and nicotinic acid on histamine-poisoned puppy bronchioles, III, 842.
- See also Levine, H.

- Gilbert, O. S. See Beath, O. A.
- Gilbert, E. C. See Baker, N. B., and Blaricome, L. van.
- Gilbert, H. W. See Blum, H. F.
- Gilbert, M., vaporisation equilibria, I, 204.
- Gilbert, N. C., vasomotor changes in the coronary arteries, III, 99.
- Gilbert, R. L. See Rochow, T. G.
- Gilbert, W. I., and Wallis, E. S., molecular rearrangements involving optically active radicals. VII. Rearrangement of optically active phenyl alkyl ethers, II, 167.
- Gildea, E. F., Man, E. B., and Peters, J. P., serum-lipids and -proteins in hypothyroidism, III, 304.
- See also Man, E. B.
- Gilder, H. See Phillips, R. A.
- Giles, N., effect of fast neutrons on chromosomes of *Tradescantia*, III, 930.
- Gileva, Z. M., and Melentev, B. N., arsenic in the apatites of the Khibiny tundra, I, 179.
- Gill, P. S. See Schein, M.
- Gillam, A. E., absorption spectra as an aid to research in organic and biological chemistry, II, 265.
- See also Aldersley, J. B.
- Gillard, G., Hustin, A., and Rijlant, P., continuous registration of mean cardiac frequency in man, III, 292.
- Gillespie, D. T. C., Macbeth, A. K., and Mills, J. A., epimeric alcohols of the cyclohexane series. III. Glucoside formation. IV. Parachor as a criterion for *cis-trans*-isomerism, II, 119, 169.
- Gillette, R. H., and Eyster, E. H., fundamental rotation-vibration band of nitric oxide, I, 56.
- See also Eyster, E. H.
- Gillies, J. See Smith, A. M.
- Gilligan, D. R., Altschule, M. D., and Linenthal, A. J., glomerular filtration rate after intravenous fluids, III, 41.
- Gilliland, E. R., and Lukes, R. V., effect of pressure on enthalpy of benzene, I, 353.
- and Scheeline, H. W., high-pressure vapour-liquid equilibrium for systems propylene-isobutane and propane-hydrogen sulphide, I, 117.
- Gilliland, W. L. See Sanger, E. B.
- Gillis, J., aqueous extracts of seeds of *Beta saccharifera*, III, 367.
- Gillis, L. See Bernstein, J.
- Gillis, R., Lions, F., and Ritchie, E., derivatives of 4-hydroxyquinoline. II, II, 330.
- Gillman, J., menstrual cycle of baboon. VI. Effect of progesterone on first part of cycle, III, 660. Effect of multiple injections of progesterone on turgescence perineum of baboon (*Papio porcarius*), III, 737. Fat: an index of oestrogen and progesterone activity in human endometrium, III, 904.
- and Smyth, G. S., hormone from human corpus luteum of early pregnancy, III, 127.
- See also Horst, C. J. van der.
- Gillman, S. W., picrotoxin in barbiturate collapse, III, 526.
- Gillman, T., incidence of ciliated epithelium and mucous cells in normal Bantu pituitary, III, 729.
- Gillo, L., purification and criteria of purity of organic physico-chemical standards, II, 33. Methods and apparatus used at the Bureau of Physicochemical Standards. XI. Purification and criteria of purity of organic standards, II, 34.
- Gillo, L., stability of colour produced by Nessler's reagent; use of the reagent in photometric determination of nitrogen, III, 176.
- Gilman, H., and Banner, I., relative reactivities of organometallic compounds. XXVIII. Halogen-metal interconversion with *m*- and *p*-bromodimethylanilines, II, 164.
- Brown, G. E., Webb, F. J., and Spatz, S. M., metallation of alcohols and amines, II, 220.
- and Cheney, L. C., dibenzofuran. XV. 1:4 and 1:4:8-Derivatives, II, 21.
- and Jones, R. G., gallium triphenyl, II, 239. Relative reactivities of organometallic compounds. XXX. Coordinate compounds in the colour test for organo-metallic compounds. XXXII. Indium triphenyl. XXXIV. Thallium phenyl, II, 276, 385.
- Langham, W., and Moore, F. W., interconversion reactions of organolithium compounds, II, 384.
- Langham, W., and Willis, H. B., dibenzofuran. XVI. Two-stage metallation of 3-bromodibenzofuran, II, 187.
- and Moore, F. W., factors affecting halogen-metal interconversion, II, 334.
- and Pacevitz, H. A., auto-metallation with sodium *m*-tolyl, II, 172. Carbonation of organo-alkali compounds, II, 266.
- Pacevitz, H. A., and Baine, O., relative reactivities of organometallic compounds. XXXI. Alkali benzyl compounds, II, 316.
- Parker, P. T., Bailie, J. C., and Brown, G. E., dibenzofuran. XIII. Orientation and substituted amines, II, 20.
- and Spatz, S. M., organolithium compounds of pyridine and quinoline, II, 190.
- and Svigono, A. C., synthesis of organobismuth compounds, II, 112.
- and Swiss, J., colour tests for organolithium compounds, II, 360.
- Swiss, J., and Brown, G. E., dibenzofuran. XVII. Interaction of bromo-ethers with lithium *n*-butyl, II, 187.
- Swiss, J., and Cheney, L. C., dibenzofuran [diphenylene oxide]. XIX. Derivatives of 2:2'-dihydroxydiphenyl, II, 342.
- and Van Ess, M. W., dibenzofuran. XIV. Diazo-coupling 1-, 2-, and 3-hydroxy-compounds, II, 21.
- and Webb, F. J., lateral metallation of phenyl methyl sulphide, II, 218.
- Willis, H. B., Cook, T. H., Webb, F. J., and Meals, R. N., dibenzofuran. XVIII. Isomeric metallation products of phenols and their methyl ethers, II, 187.
- and Yablunsky, H. L., conversion of bismuth aryl halides into bismuth triaryl compounds, II, 198.
- Gilmont, P. See Blanchard, A. A., and Gamble, E. L.
- Gilmour, J. See Campbell, N.
- Gilmour, D., anaerobic gaseous metabolism of termite *Zootermopsis nevadensis*, Hagen, III, 746.
- Gilse, P. H. G. van, development of exostoses of external meatus owing to irritation by cold water, III, 117.
- Gilson, A. S., jun., increased accommodation to electric currents produced by vagal inhibition of turtle atrium, III, 382.
- Gilson, A. S., jun. See also Smith, J. R.
- Gilta, G., crystalline form of alkali arsanilates, I, 13. Di-*p*-aminophenylarsinic acid, II, 30.
- Gimbel, H. S. See Hodes, H. L.
- Ginandes, G. J., and Topper, A., insensible perspiration in children. V. Influence of atropine, pilocarpine, and adrenaline, III, 158.
- Ginevinski, A. G., and Itina, N. A., action of eserine on skeletal muscle of tortoise, III, 19.
- and Michelson, N. J., electric phenomena in eserine-poisoned frog muscle, III, 19. Effect of eserine on skeletal muscles of frog, III, 20.
- Gingold, N., differential diagnosis of chronic leukaemia and myeloid-leukaemoid states, III, 791.
- See also Dimitriu, C. C.
- Gingrich, N. S., diffraction of X-rays by liquid and plastic sulphur, I, 100.
- See also Eisenstein, A.
- Ginnings, P. M., Plonk, D., and Carter, E., aqueous solubilities of aliphatic ketones, I, 408.
- Gins, H. A., rôle of bacteria in destruction of teeth by dental caries, III, 355.
- Ginsberg, E. See Copley, M. J.
- Ginsberg, H., colorimetric determination of magnesium with "titanium yellow," I, 232.
- Ginsburg, A. S., data on determination of ear in *Triton taeniatum*, III, 465.
- Ginsburg, E., and Benotti, N., determination of thiocyanate in serum after administration of its salts, III, 288.
- Ginsburg, G. I. See Poleshaev, L. V.
- Ginsburg, J. W. See Brown, C. L.
- Ginsburg, S., post-operative progressive exophthalmos with low basal metabolic rate, III, 407.
- Ginsburg, S. R. See Smyth, C. P.
- Ginzburg, V. L., asymmetry of effective cross-section for collisions of the second kind, I, 185.
- Ginzton, L. L., and Connor, C. L., crude wheat-germ oil as factor of tumour formation in rats, III, 422.
- Giolitti, G., distribution of thiol groups in amphibians and petromyzonts, III, 421.
- Giordani, M., and Negro, R., [biochemical] preparation of aliphatic ketones, III, 540.
- Giordano, C., and Zeglio, P., adrenaline content of arterial human plasma before and after intravenous injection of insulin, III, 304.
- Giovanni, C. See Vialli, M.
- Girard, G., differentiation between *B. pestis* and *B. pseudo-tuberculosis* by the reaction with nitrite, III, 453.
- Girard, P., and Abadie, P., molecular interactions in solutions; their effects on rotation of dipoles in an alternating [electric] field, I, 65.
- Giraud, J. C. See Aubry, M.
- Giri, K. V., Indian gooseberries (*Phyllanthus emblica*, L.) as source of vitamin-C, III, 324.
- and Krishnamurthy, P. V., co-existence of oxidising and protective mechanisms for vitamin-C in plant tissues, III, 752.
- and Shourie, K. L., serum-phosphatase activity in rats fed on a poor South Indian diet variously supplemented, III, 97. Protective action of tissues of scorbutic and normal guinea-pigs against oxidation of vitamin-C, III, 819.

- Gironés, L., blood transfusion in the Spanish war, III, 378.
- Giroud, A., and Ratsimamanga, R., importance of normal ascorbic acid content, III, 430.
- and Santa, N., ascorbic acid in the adrenal medulla; its variations as a result of stimulation, III, 235. Absence of adrenocortical hormone in ascorbic acid deficiency, III, 306.
- Giroud, P., and Panthier, R., diminution of the antigenic power of the murine typhus virus (guinea-pig) after passage through mice, III, 78.
- Gisolf, J. H., dielectric losses of irradiated zinc sulphide phosphors, I, 9.
- and Kröger, F. A., proportionality of luminescence of zinc sulphide phosphors to irradiation at low intensities, I, 8.
- Gissane, W., Blair, D., and Rank, B. K., fractures of neck of femur in convulsion therapy, III, 487.
- Gisvold, O., celastrol. II., II, 138. Sterol and resin alcohols from *Celastrus scandens*, III, 461. Xanthophyll from wheat germ, III, 832.
- Giuli-Kevchian, R. See Babajan, A.
- Giunti, M. H. See Novelli, A.
- Giuntini, J. See Levaditi, J.
- Giuşcă, D., mineralisation of auriferous deposits of Săcărâmb (Nagyag) [Roumania], I, 182.
- Giullin, C. M., Yates, W. W., and Stage, H. H., effect of chemicals on hatching of mosquito eggs, III, 835.
- Glacet, Z. C., reduction of a mixture of benzaldehyde and crotonaldehyde, II, 229.
- Gladischevskaja, K. A. See Goremikin, V. I.
- Gladstone, G. P., and Fildes, P., culture medium for general use without meat extract or peptone, III, 933.
- Glagolev, V. See Jaroslav, S.
- Glaichgewicht, Z. U. See Kobryner, A.
- Glanzmann, E., action of iodine in hyperplasia of thymus, III, 304.
- Glaser, C. See Allison, J. B.
- Glaser, E., and Drobnik, R., active ingredients of garlic, III, 61.
- Glaser, M. A., atypical facial neuralgia, III, 482.
- Glaser, N. M. See Maier, N. R. F.
- Glaser, V., apparatus for electro-optic registration of respiratory movements (electro-pneumograph), III, 194.
- Glasgow, A. R., jun. See Rossini, F. D.
- Glasgow, R. D. See Fidler, H. K.
- Glasco, G. N., and Steigman, J., radioactive products from gases produced in uranium fission, I, 341.
- Glasco, P. K., and Sorum, C. H., Lange test. I. Influence of particle size and pH of gold sols on Lange test readings on paretic spinal fluids. II. Influence of particle size and pH of gold sols on Lange test readings in syphilitic and tabetic cerebrospinal fluids, III, 24, 395.
- Glass, H. B. See Bliss, A. R., jun.
- Glass, H. G. See Hurd, C. D.
- Glass, J. J. See Goddard, E. N.
- Glass, S. See Rosenfeld, S.
- Glass, S. J., Deuel, H. J., and Wright, C. A., sex hormone studies in male homosexuality, III, 657.
- See also Edmondson, H. A.
- Glass, V., effect of blood digest and hæm on growth of *C. diphtherie*, III, 168.
- Glascock, H. M., and Wain, R. L., distribution of manganese in the pea seed in relation to marsh spot, III, 367.
- Glasser, J. See Simons, J. H.
- Glasser, O. See Barth, H.
- Glasstone, S., oxidation-reduction potentials and their applications, I, 220.
- See also Eyring, H.
- Glathart, J. L. See Hoag, J. B.
- Glattfeld, J. W. E., and Lee, E. C., dl-threonic acid from γ -hydroxyerotic acid, II, 153.
- and Rietz, E., improved preparation of dl-threonic and -erythronic acids, II, 204.
- Glaubach, S., sulphapyridine potentiation of narcotic and toxic effects of papaverine in rats and rabbits, III, 247.
- See also Antopol, W.
- Glaubiger, A., and George, K., determination of pH values of biological fluids, III, 447.
- Glavind, J. See Dam, H.
- Glaze, F. W., computing titration blanks, I, 172.
- Glazebrook, A. J. See Roff, F. S.
- Glazko, A. J., and Greenberg, D. M., diffusible organic blood-clotting factor, III, 92. Mechanism of inhibiting effect of electrolytes and heparin on blood coagulation, III, 470.
- Glazov, N. I., effect of surface-active substances on rate of evaporation of water from solutions. II., I, 253.
- Glazunov, A., Starosta, O., and Vondrášek, V., experimental evidence for secondary deposition of metals on the cathode in electrolysis of complex salts, I, 226.
- Glees, P., sympathetic nervous system of *Salicaria*, III, 715.
- Gleich, M., and Weintraub, R., comparative value of Levinson and tryptophan tests in diagnosis of tuberculous meningitis, III, 202.
- See also Bullowa, J. G. M.
- Glemser, O., new modification of manganese dioxide, I, 128. Binding of water in manganese dioxide, titanium dioxide, and thorium dioxide hydrates, I, 211. Dielectric constants of oxides, hydroxides, and oxide hydrates, I, 283.
- Glenn, F. See Lasher, E. P., jun., and Person, E. C.
- Glenn, P. M. See Elsom, K. A., and Nichols, A. C.
- Glenn, R. A., and Bailey, J. R., nitrogen compounds in petroleum distillates. XVI. Use of multiple acid extraction in isolation of 2:3:4-trimethyl-8-ethylquinoline, II, 24.
- Glennie, E. A., night-shining eyes, III, 893.
- Glenny, F. H., systematic study of main arteries in heart region; aves, III, 781.
- Gley, P., Delor, J., and Jacquot, L., biological standardisation of insulin, III, 411.
- Paulin, G., and Touchard, T., vasomotor tone and resistance to infection, III, 384.
- Glick, A. W. See Peking, S. M.
- Glick, C. F. See Ewing, W. W.
- Glick, D., tropine esterase, III, 826.
- See also Antopol, W.
- Glickstein, J. See Hollander, F.
- Glingar, A., drug treatment of male gonorrhoea, III, 599.
- Glissen, C. S. See Chesley, L. C.
- Glock, G. E., glycogen and calcification, III, 518.
- See also Murray, M. M.
- Glockler, G., and Leader, G. R., Raman effect of chlorobromofluoromethane, I, 95. Fundamental frequencies of trihalomethanes, I, 429.
- Glockler, G., and Sage, C. G., Raman effect of symmetrical difluorotetrachloroethane, I, 195.
- Gloor, H. U., causation of megalourter, III, 178.
- Glotov, V., combined effect of colchicine and heteroauxin on seedlings of camphoryielding basil, III, 83. Effect of colchicine from *Colchicum umbrosum*, Stev., on the camphor basil, III, 272.
- Glötz, (Mlle.) G., determination of coproporphyrin, III, 620.
- See also Binet, L., and Polonovski, M.
- Gloyne, S. R., and Kerridge, P. M. T., drip flow-meter for transfusion, III, 186.
- Glücksman, A., development and differentiation of tadpole eye, III, 398.
- Glycart, C. K., micro-chemical tests for alkaloids, II, 386.
- Gneiting, W., toxic adenoma of thyroid, III, 894.
- Gniubkin, V., Dobrinskaja, A., and Neumann, M., polarographic method in organic chemistry. II. Correction for losses of volatile substances removed by flow of inert gases through the electrolyte, I, 224.
- Gnosspeli, A., specific precipitation test for cow's milk, III, 911.
- Go, C., anthelmintic action of *Sargassum thunbergii*, J. Ag., III, 924.
- Go, Y., determination of distribution of crystallites in fibres by direct and indirect methods, I, 421.
- and Tani, H., polymeric products from amino-acids, II, 70.
- Goadby, H. K., and Richardson, J. S., disappearance of injected insulin from blood, III, 304.
- Gober, M. See Mayfield, C. R.
- Gochenour, W. S. See Stein, C. D.
- Gochshtein, J. P., adsorption and reduction of atmospheric oxygen at a dropping mercury electrode in presence of CN' or S'' ions, I, 220.
- Godard, H. P., McCarthy, J. L., and Hibbert, H., hydrogenation of wood, II, 251.
- Godard, O., world-wide variations of the earth's magnetic field and intensity of cosmic radiation, I, 54.
- See also Vallarta, M. S.
- Godbole, R. D., geology of the area around Phonda and parts of Bavda Jahgir, District of Ratnagiri, Bombay Presidency, I, 238.
- Goddard, D. R. See Marsh, P. B.
- Goddard, E. N., and Glass, J. J., deposits of radioactive cerite near Jamestown, Colorado, I, 380.
- and Lovering, T. S., nickel deposit near Gold Hill, Colorado, I, 398.
- Godden, W., "trace" elements in human and animal nutrition, III, 231.
- See also Duckworth, J., and Fraser, A. H. H.
- Godfrey, A. B., and Olsen, M. W., individual hen and breed difference in egg weight losses during incubation, III, 649.
- Godfried, M. S. See Thoms, H.
- Godfrin, A., derivatives of ketonic aliphatic acids, II, 34.
- Godina, G., development of adipose tissue in ox, III, 280.
- Godron, Y. See Escher-Desrivieres, J.
- Godwin, M. C., development of complex IV in the pig, III, 699.
- Göbel, I., serum-lipase in diabetics, III, 561.

- Goebel, W. F., immunity to experimental pneumococcal infection with artificial anemias containing saccharide of synthetic origin, 541.
See also Beeson, P. B.
- Goebell, O., treatment of anemias occurring in premature birth and after infections [with nicotinamide and lactoflavin], III, 468.
- Gödde, O. See Langenbeck, W.
- Goedieke, E., determination of specific charge of the electron, I, 92.
- Goedrich, P. See Seherzer, H. R.
- Goehring, M. See Stamm, H.
- Gömör, P., and Gruber, Z. von, coronary insufficiency in extrarenal azotemia, III, 475.
- Podhradzsky, L., and Kring, J., significance of circulation in pathogenesis of extrarenal azotemias, III, 286.
- and Sármay, E., hypochlorotic calcium nephrosis, III, 586.
- Goepfert, G. J., micro-determination of succinic acid, III, 778.
- Göpfert, H. See Matthes, K.
- Goepfert-Mayer, M. See Kane, B. G.
- Goerner, A., and Goerner, M. M., effect of dibenzanthracene on the liver, III, 226.
Influence of a carcinogenic compound on hepatic storage of vitamins, III, 427.
- Goerner, M. M. See Goerner, A.
- Goetsch, C., effect of adrenaline in peanut oil and adrenaline pellets on thyroid gland of guinea-pig and rabbit, III, 896.
- Goetsch, E., and Lytle, J. D., precipitin studies [of sera] in nephrosis and nephritis, III, 187.
- and Mason, H. H., glycosuria in lead poisoning, III, 681.
- Goetsch, M. See Pappenheimer, A. M.
- Götz, F. W. P., ozono clouds, I, 378.
- Goetz, R. H., nervous control of blood-flow through skin studied by effect of adrenaline, III, 101.
Control of blood flow through intestine as studied by effect of adrenaline, III, 885.
- Gözberk, R., two cases of congenital facial hemi-hypertrophy with anomalous ocular manifestations, III, 488.
- Gözy, B. See Vársárhelyi, J.
- Goffart, M., acetylcholine in alimentary tract of dog; influence of denervation, III, 416.
and Bacq, Z. M., free acetylcholine in venous blood from the alimentary tract of dog, III, 416.
See also Bacq, Z. M., and Heirman, P.
- Gogate, D. V., and Kothari, D. S., degeneracy in non-relativistic Bose-Einstein statistics, I, 311.
- Gogolashvili, S. I., relation between number of carbon atoms, refractive index, and density of hydrocarbons, I, 16.
- Gogorishvili, P. V., Kulgina, V. N., and Zvjaginzev, O. E., higher oxide compounds of iron, I, 230.
- Gogte, G. R., β -arylglutamic acids. V. α -C-Diacetylation of β -arylglutamic anhydrides: synthesis of diphenyl derivatives, II, 133.
- Gohr, H., and Wedekind, T., ultra-sound in medicine, III, 930.
- Gohring, H. See Basse, W.
- Gokhale, G. D., Patel, M. S., and Shah, R. C., constitution of anacardic acid, principal constituent of cashew-nut shell oil, II, 373.
- Gold, A., Eagle complement fixation test for syphilis, III, 170.
See also Lattimore, J. L.
- Gold, H., value of a "repeat" injection of tetanus toxoid (secondary stimulus) in active immunisation against tetanus, III, 542.
- and Cattell, M., mechanism of digitalis action in heart failure, III, 523.
- Kwit, N. T., and Cattell, M., purified digitalis glucosides. I. Potency and dosage of "digitaline native" by oral administration in man, III, 823.
- Kwit, N. T., Otto, Harald, and Fox, T., physiological adaptations in cardiac slowing by digitalis and their bearing on problems of digitalisation in patients with auricular fibrillation, III, 62.
See also Hediger, E. M., and Meerwein, H.
- Gold, M. H. See Adams, R.
- Gold, O. See Guth, E.
- Goldacre, R. J. See Mellor, D. P.
- Goldberg, H., and Eyster, J. A. E., relation of electrical and mechanical events in ventricle of turtle, III, 474.
- Goldberg, L., transition probabilities for He I, I, 87.
- Goldberg, L. C., keratoderma climactericum (Haxthausen's disease) [treated with oestrone], III, 31.
Histaminase in allergic dermatoses, III, 938.
- Goldberg, M. W., and Monnier, R., steroids and sex hormones. LX. Transformation of cyanohydrins of androstane series into ketones of the perhydrochrysene series. LXIV. Preparation of D-homodihydrotestosterone, II, 181, 350.
and Müller, P., steroids and sex hormones. LXIII. Attempted synthesis of oestrogens with use of $\alpha\beta$ -diacetylene, II, 350.
See also Ruzicka, L.
- Goldberg, S. D., Ringk, W. F., and Spoerri, P. E., preparation of monoalkylamino-alkyl aminobenzoates, II, 85.
- Goldberg, S. K., and Sachs, A., sulphapyridine in staphylococcal bacteraemia, III, 242.
- Goldberger, E. W., comparative study of erythrocyte sedimentation test with Helige-Volmer (Langer) microsedimeter and modified Westergren method, III, 469.
- Goldberger, M. A. See Frank, R. T.
- Goldblatt, H., experimental production and pathogenesis of hypertension due to renal ischaemia, III, 475.
- Kahn, J. R., Bayless, F., and Simon, M. A., effect of excision of the carotid sinuses on experimental hypertension produced by renal ischaemia, III, 386.
- Kahn, J. R., and Hanzal, R. E., effect of blood pressure of constriction of abdominal aorta above and below site of origin of both main renal arteries, III, 102.
See also Gerbi, C., and György, P.
- Goldblatt, M. W. See Rimington, C.
- Goldbloom, A. A., Kramer, M. L., Lieberman, A., and Roht, P. K., posture and cardiac output, III, 383.
and Lieberman, A., renal arteriolonecrosis without papilledema, III, 222.
- Goldby, F., experimental investigation of motor cortex and its connexions in the phalanger, *Trichosurus vulpecula*, III, 22.
Relative position of hippocampus and corpus callosum in placental mammals, III, 298.
- Golden, J. S. See Brams, W. A.
- Golden, L. A., Sieracki, L. A., Handelsman, M. B., and Pratt, J. H., diastase activity of blood and urine when pancreatic ducts are permanently closed, III, 37.
- Golden, R. F., and Heyerdale, W. W., sensitivity to sodium morrhuate and monoethanolamine oleate (monolate), III, 929.
- Golden, T. S. See Jacobs, J. L.
- Golden, W. R. C. See Hamilton, J. B.
- Goldenberg, N., magnetism and valency: manganese compounds, I, 347.
- Goldfarb, M. O., action of cytotoxic antireticular serum on tissue culture. I, III, 785.
- Goldfarb, W., Provisor, B., and Koster, H., circulation during spinal anaesthesia, III, 633.
See also Bowman, K. M., Himwich, H. E., and Wortis, J.
- Goldhaber, G. S. See Good, W. E.
- Goldhaber, M., mechanism of neutron loss reaction produced by deuterons, I, 384.
See also O'Neal, R. D.
- Goldhahn, R., anaesthesia in war conditions, III, 252.
- Goldhamer, S. M. See Isaacs, R.
- Goldie, H., anaphylactic reaction of guinea-pig simultaneously sensitised with sera from two different species, III, 250.
- Goldin, H. S. See Baldwin, F. M.
- Goldin, M. I., interrelations between mosaic virus and ascorbic acid in tobacco plant, III, 617.
- Goldirev, L. N., and Postovski, I. J., preparation and properties of α - and β -naphthylglyoxal, II, 253.
- Goldman, D., effects of large doses of protamine-zinc-insulin in non-diabetic individuals, III, 498.
Electrocardiogram in insulin shock, III, 898.
See also Tietz, E. B.
- Goldman, E. E. See Kazanski, B. A.
- Goldman, F. See Gilbert, A. J.
- Goldman, F. H. See Dalla Valle, J. M., and Schwartz, Louis.
- Goldman, L., effect of fever artificially induced on skin-sensitivity of guinea-pigs to turpentine, III, 256.
and Cullen, G. E., vesicant chemical warfare agents, III, 864.
Medical aspects of chemical warfare, III, 864.
See also Aggeler, P. M., Antopol, W., and Ryan, N. W.
- Goldman, S. See Brody, H.
- Goldman, S. F., and Ginberg, B. L., potency of pituitary gonadotropins, III, 899.
See also Ginberg, B. L.
- Goldman, S. S. See Rozenfeld, L. E.
- Goldschmidt, B., fractional mixed crystallisation using radio-elements, I, 171.
See also Auger, P.
- Goldschmidt, R. See Calvin, M.
- Goldschmidt, S. See Ravdin, I. S.
- Goll, H. See Asperger, H.
- Golschein, N. I., transformations of polystichous epithelium of trachea in reparative regeneration, III, 17.
- Goldsmith, E. D., specificity of evocator in *Hydra*, III, 278.
- Goldsmith, G. A., Gowe, D. F., and Ogaard, A. T., determination of vitamin-C nutrition by a skin test, III, 53.
Vitamin-C nutrition in pellagra, III, 858.
- Goldsmith, H. H., and Motz, L., spin of the neutron, I, 383.
See also Hornbostel, J., and Powers, P. N.
- Goldsmith, J., slit lamp observations during experimental intracapsular extraction of cataract, III, 377.

- Goldstein, B. I., and Eliaschkevitch, E. S., comparison of lipolytic activity of sulphate- and acetone-preparations of rabbit liver, III, 71.
- and Volkenzon, D. V., ascorbic acid content of rat placenta, III, 53.
- Goldstein, H., and McFarland, R. A., biochemistry of epilepsy, III, 486.
- and Stern, K., synthesis of 5-bromo-2-naphthylamine, II, 339. 5:8-Dibromo-2-naphthoic acid and 5:8-dibromo-2-naphthylamine, II, 345.
- See also McFarland, R. A.
- Goldstein, L., Bose-Einstein fluids, I, 149.
- Rogozinski, A., and Walen, R. J., interaction of fast neutrons with the uranium nucleus, I, 53.
- Goldstein, M. B., sensitivity to gentian-violet (methylosaniline), III, 339.
- Goldstein, M. S., physical anthropology, III, 700.
- Goldstone, P. B. See Hall, V. E.
- Goldwater, L. See Greenburg, L.
- Goldzieher, M. A., diagnostic significance of cranial roentgenograms in pituitary disease, III, 846.
- Golightly, W. H., and Lloyd, L., insect size and temperature, III, 42.
- Golla, F. L., Blackburn, J. M., and Graham, S., comparison between effects of isomyn (benzedrine) and of methylisomyn, III, 525.
- See also Fleming, G. W. T. H.
- Golla, Y. M. L. See Reiss, M.
- Gollnow, H. See Schüller, H.
- Golob, M., and Nussbaum, C., evaluation of Takata-Ara reaction as liver function test, III, 220.
- Goloborodko, T., and Leipunski, A. I., scattering of photo-neutrons from deuterium by nuclei of atoms of light elements, I, 3. Scattering of photo-neutrons from deuterium by nuclei of atoms of heavy metals, I, 90. Nuclear cross-sections for neutrons with 860 ke.v. energy in the region of light elements, I, 277.
- Golovati, R. N., Iljenko, P. I., and Torski, D. E., precipitation of ferric hydroxide in presence of simple and complex ions, I, 81.
- Golovnia, V. A. See Lebedinski, V. V.
- Golovtchenko, V. See Urion, E.
- Goltman, D. W. See Mitchell, E. C.
- Golubenko, Z. P. See Gertzriken, S. D.
- Golumbic, C., and Mattill, H. A., oxidation of vitamin-E, III, 752. α -Tocopherylquinone and dystrophy in rabbits, III, 820.
- Gomarasca, P., innervation of conduction tissue of heart, III, 13. [Effect of caffeine on glycogen content of heart], III, 15.
- Gombás, P., calculation of eigenfunction and energy of ground state of valency electron in alkali atoms, I, 149.
- Gomez, E. T., and Turner, C. W., effect of anol on growth of the mammary gland, III, 33.
- Gómez Aranda, V., variation of physical constants in homologous series. II. Density, I, 314.
- Gomori, G., differential stain for cell types in the pancreatic islets, III, 89. Effect of factors on results of silver impregnation for reticulum fibres, III, 89. Microtechnical demonstration of phosphatase in tissue sections, III, 274. Cells of pancreatic islets, III, 466. Staining carious lesions in teeth, III, 837.
- Gomori, G., Friedman, N. B., and Caldwell, D. W., β -cell changes in guinea-pig pancreas in relation to blood-sugar, III, 124.
- Gonoe, J. E., jun. See Anderson, H. D.
- Gonikberg, M. G., Fastovski, V. G., and Gurvitsch, J. G., solubility of gases in liquids at low temperatures and high pressures. I. Solubility of hydrogen in liquid nitrogen at 79–109° K. and at pressures up to 190 atmospheres, I, 206.
- Gonnard, P. See Polonovski, M.
- Gontscharov, S., diene syntheses, II, 10.
- Gonyer, F. A. See Palache, C.
- Gonzaga, A. C., chemical study of blood of Philippine carabaos, III, 787.
- González, L. M. See Morales-Otero, P.
- González Barredo, J. M., graphical methods of kinetic chemistry, I, 325.
- Good, W. E., and Goldhaber, G. S., scattering cross-section of protons for 900-ke.v. neutrons, I, 338.
- Good, W. M., and Stranathan, J. D., improved method of making permanent electrets, and factors which affect their behaviour, I, 41.
- Goode, W. G. See Spaulding, E. H.
- Goodell, H. See Hardy, J. D., Schumacher, G. A., and Wolff, H. G.
- Goodeve, C. F. See Arnold, J. E., Broda, E. E., and Cohu, G.
- Goodhart, R., revaluation of Goodhart and Sinclair's method for determination of blood-coccarboxylase, III, 791.
- and Sinclair, H. M., deficiency of vitamin-B₁₂ in man as determined by blood-coccarboxylase, III, 233.
- See also Jolliffe, N.
- Goodhill, V., syphilis of ear: histopathologic study, III, 117.
- Goodhue, L. D., and Haller, H. L., non-crystalline constituents of *Tephrosia virginiana* roots, II, 380.
- Goodlow, R. J. See Green, R. G.
- Goodman, C., and Evans, R. D., new physical method for determination of geologic ages, I, 379. Determination of the radon and thoron content of air, I, 393.
- See also Curtiss, L. F., and Evans, R. D.
- Goodman, G. L., Haworth, W. N., and Peat, S., polysaccharides. XXXVII. Oxycellulose, II, 37.
- Goodman, J., and Sulzberger, M. B., allergy in dermatology, III, 938.
- Goodman, M., Shuman, H., and Goodman, S., idiopathic lipæmia with secondary xanthomatosis, hepatosplenomegaly, and lipæmic retinalis, III, 754.
- Goodman, S. See Goodman, M., and Schiff, L.
- Goodpasture, W. C. See Dragstedt, L. R.
- Goodrich, F. J. See Trupp, M. S.
- Goodson, W. H., and Sheard, C., photometric determination of bilirubin in urine with diazobenzenesulphonie acid, III, 852.
- Goodspeed, G. E., Fuller, R. E., and Coombs, H. A., metasomatism of a shale to an igneous-appearing rock, I, 239.
- Goodway, N. F., and West, T. F., addition reactions to conjugated systems. II. Caryophyllene and maleic anhydride, II, 49. Condensation products from "α-terpinene" and the carenes with maleic anhydride, II, 255.
- Goodwin, J. E., and Hall, G. E., human electroencephalogram and its clinical significance, III, 190.
- See also Hyland, H. H.
- Goodwin, M. See Rubinstein, H. S.
- Goodwin, R. H., comparison of *Avena* techniques in determination of 3-indolylacetic acid, III, 174. Evidence for the presence in ether extracts of substances partially masking the activity of auxin, III, 174.
- Goor, H. van, localisation and formation of carbonic anhydrase in chick embryo, III, 448. Distribution and significance of carbonic anhydrase, III, 533.
- See also Noyons, A. K. M.
- Goormaghtigh, H. N., glomus structure of carotid body, III, 466.
- Goormaghtigh, N., existence of an endocrine gland in media of renal arterioles, III, 386. Cyclic changes in endocrine cells of renal artery of rabbit, III, 876.
- and Grimson, K. S., vascular changes in renal ischæmia: cell-mitosis in media of arteries, III, 102.
- and Pannier, R., cardiac paraganglia and carotid and cardioaortic pressor-receptor areas in adult cat, III, 697.
- Goosen, W. J., phototropism of honey bee (*Apis mellifica*), III, 606.
- Goossens, N. See Dyckerhoff, H.
- Gootnick, A. See Saland, G.
- Göpfert, H. See Gross, F.
- Góra, E., theory of the Compton effect. II, I, 50.
- Goralewski, G., clinical studies and animal experiments on lungs affected by aluminium dust, III, 865.
- Goranson, R. W., physics of stressed solids, I, 247.
- and Johnson, E. A., attainment of high hydrostatic pressures, I, 332.
- Gorbman, A., action of mammalian sex hormones in the lizard *Sceloporus occidentalis*, III, 658.
- See also Creaser, C. W.
- Gording, R., and Flexser, L. A., m.p. of nicotinic acid, II, 288.
- Gordon, A. H., Green, D. E., and Subrahmanyan, V., liver aldehyde-oxidase, III, 608.
- See also Subrahmanyan, V.
- Gordon, A. R. See Allgood, R. W., Hollingshead, E. A., and James, W. A.
- Gordon, A. S., Kleinberg, W., and Charipper, H. A., reticulo-endothelial system and hormone refractoriness, III, 493.
- Levenstein, I., and Charipper, H. A., influence of age of animal and nature of injected hormone on antihormone production, III, 213.
- See also Kleinberg, W., and Vollmer, E. P.
- Gordon, B. E., and Schischlovski, A. A., photoluminescence of electrolyte solutions. I, I, 66.
- Gordon, C., direct study of natural selection, III, 179.
- and Gordon, F., genetical analysis of a sex-limited character in *Drosophila melanogaster* and evolution of secondary sexual characteristics, III, 179.
- Gordon, E. S., deoxycorticosterone and its esters in Addison's disease, III, 896.
- See also Axelrod, A. E., and Feinstein, R. N.
- Gordon, F. See Gordon, C.
- Gordon, H., museum container made of lucite, III, 618.
- Gordon, H. (Cambridge). See Herbert, D.
- Gordon, H. H., Levine, S. Z., Deamer, W. C., and McNamara, H., daily energy requirements of premature infants, III, 753.

- Gordon, H. H. See also Levine, S. Z.
- Gordon, H. McL., anthelmintic efficiency of phenothiazine against *Trichostrongylus* spp. in sheep, III, 440. Phenothiazine as an anthelmintic; comparison of efficiency of finely and coarsely ground phenothiazine against *Eso-phagostomum columbianum*, III, 759. Anthelmintic efficiency of lentin (Merck) against *E. columbianum*, III, 759.
- and Lipson, M., anthelmintic efficiency of compounds related to phenothiazine, III, 924.
- and Whitten, L. K., field trial comparing phenothiazine, tetrachloroethylene emulsion, and copper sulphate and nicotine sulphate mixture for treatment of trichostrongylosis, III, 759.
- Gordon, J., and Johnstone, K. I., bactericidal action of normal sera, III, 687.
- and McLeod, J. W., simple rapid method of distinguishing *Cl. novyi* (*B. oedematis*) from other bacteria associated with gas gangrene, III, 263.
- Gordon, J. E., infection of man with virus of equine encephalomyelitis, III, 267.
- See also Hawkins, J. W.
- Gordon, L. E. See Harrold, G. C.
- Gordon, W. G., Cahill, W. M., and Jackson, R. W., availability for growth of *N*-methyltryptophan administered as its acetyl derivative, III, 49.
- Gordon, W. S., Stewart, J., Holman, H. H., and Taylor, A. W., blood changes and post-mortem findings following intravenous inoculation of sheep with culture filtrates of *Cl. welchii*, types A, C, and D, III, 540.
- See also Taylor, A. W.
- Gordonoff, T., and Meier, K., urinary disinfectant action of mandelic acid, III, 247.
- Gordy, W., spectroscopic evidence for hydrogen bonds: effect of chelation on the carbonyl frequency, I, 345. Spectroscopic study of deuterium bonds, I, 345.
- and Stanford, S. C., spectroscopic evidence for hydrogen bonds: comparison of proton-attracting properties of liquids. II. SH, NH, and NH₂ compounds, I, 193.
- See also Nielsen, A. H., and Stanford, S. C.
- Gore, R. C. See Buswell, A. M.
- Gore, W. A. See McNamara, W. L.
- Goreczky, L., and Berencsi, G., influence of fluctuations in blood pressure on plasma-fibrinogen, III, 286.
- and Illényi, A., effect of changes in vegetative tonus on isohæmagglutinins of human blood, III, 9.
- Goremikin, V. I., hydroxylamine-thiocarbamide platinum compounds, I, 267.
- and Gladischevskaja, K. A., oxalates of ammonium-pyridine platinum compounds, I, 267.
- Gorenbein, E. J., conductivity and equilibrium coefficients of certain complex compounds of aluminium bromide in benzene, I, 213.
- and Slavutskaja, I. M., cryoscopic study of copper and silver halides in benzene and ethylene dibromide solutions of aluminium bromide, I, 72.
- Gorer, P. A., renal lesions found in pure lines of mice, III, 222. Incidence of tumours of liver and other organs in pure line of mice (Strong's CBA strain), III, 316.
- Gorev, N. N., arterial hypertension in dogs [by sino-aortic denervation], III, 192.
- Goria, C., fibrous structure of alkali metals, I, 100, 150.
- Gorin, M. See Velick, S. F.
- Gorin, M. H., Abramson, H. A., and Moyer, L. S., effect of phosphate buffers on the electrical mobility of hæmoglobin, I, 213.
- See also Moyer, L. S.
- Gorini, C., enzymic grouping of bacteria, III, 352.
- Gorlinski, A. K. See Kulberg, L. M.
- Gorman, M., hydrolysis of stannous ion in stannous perchlorate solutions, I, 116.
- Gornall, A. G., and Hunter, A., behaviour of uramido-acids in the nitrous acid method for determination of amino-nitrogen, II, 121.
- Gorodetzki, G. A., formation of ozone and oxides of nitrogen during electrical discharge, and their reaction. II, 1, 262.
- Gorodisskaja, G. J., and Milotvorskaja, L., effect of muscle tissue on pH on surrounding medium, III, 567.
- Gorrie, D. R., vitamin-P in purpura hæmorrhagica due to arsenic, III, 858.
- Gorter, C. J. See Teunissen, P.
- Gorter, F. J., and Spruyt, J. P., vitamin-A determinations by means of rat growth tests, III, 427.
- Gortner, R. A., electrokinetics. XXIII. Electrokinetics as a tool for study of molecular structure of organic compounds, I, 114.
- Gortner, R. A., jun., chronic selenium poisoning of rats as influenced by dietary protein, III, 510.
- and Lewis, H. B., retention and excretion of selenium after administration of sodium selenite to white rats, III, 155.
- See also Lewis, H. B.
- Goss, C. M., first contractions of heart, III, 782.
- Goss, F. R., solvent effect in dipole moment measurement. II. Resolution of the solvent effect into its contributory factors. III. Polarisation and association of alcohols in the liquid phase, I, 354, 358.
- See also Coppock, J. B. M.
- Goss, H., and Cole, H. H., purification of mare gonadotropic hormone, III, 404.
- and Guilbert, H. R., minimum vitamin-A and carotene requirement of the rat, III, 320.
- See also Cole, H. H., and Pencharz, R. I.
- Goss, M. J. See Phillips, Maz.
- Goss, N. P., lattice distortion in plastically deformed α -iron, I, 432.
- Goss, S. W., and Ehrlich, W., frontal puncture for ventriculography, III, 637.
- Gosselin, A., effect of two purine alkaloids on plant cell mitosis, III, 693.
- Gossner, B., structural relations between sulphates and phosphates or arsenates, particularly between gypsum and pharmacolite, I, 422.
- Góth, A., detection of hypovitaminosis-C, III, 595.
- Gothié, S., and Moricard, R., testicular development produced by injection of serum gonadotropin into hypophysectomised rats, III, 302. Effect of serum and pituitary gonadotropin on meiosis in the hypophysectomised rat, III, 302.
- Gotô, H., fluorescence analysis. I. Fluorometry of fluorescein and eosin. II. Fluorescence indicators. III. Fluorescence-adsorption indicators. IV. α -Naphthylflavone as a fluorescence indicator in iodometry and bromometry, I, 267, 370, 418. Electrodes for potentiometric and conductometric titrations, I, 420.
- Goto, J. See Wake, I.
- Goto, J. M. See Tragerman, L. J.
- Goto, K., and Okabe, K., comparison of densities of water from different places on the earth, I, 378.
- See also Titani, T.
- Goto, R., action of phosphate on hexoses. IV. Formation of lactaldehyde concurrently with acetol, II, 244.
- See also Horiba, S., and Nodzu, R.
- Goto, T., development of testicle cells in tissue culture, III, 901.
- Gotsev, T., rôle of the blood vessels and heart in regulation of blood pressure. I. Histamine. II. Veritol, III, 523. Action of ephedrine on blood vessels, III, 600.
- Gotshalk, H. C., and Tilden, I. L., anterior pituitary necrosis following parturition, III, 402.
- Gott, O. See Goubeau, J.
- Gottdenker, F., and Wachstein, M., circulatory effects of venom of the Indian cobra (*Naja naja*), III, 682.
- Gotten, H. B., and MacGowan, J. J., black-water fever from spider bite, III, 762.
- Gottlieb, F. See Brauner, R.
- Gottlieb, R. See Lozinski, E.
- Goubeau, J., and Gott, O., Raman spectrum of thiocyno-compounds and structure of the thiocyanate group, I, 346.
- Goudsmit, A., and Binger, M. W., treatment of nephrotic edema, III, 910.
- Goudsmit, J. See Westenbrink, H. G. K.
- Goudsmit, S., radioactivity in biological experiments, III, 329.
- and Sanderson, J. L., multiple scattering of electrons. I. and II, I, 89, 185, 336.
- See also Spees, A. H.
- Gougerot, L. See Beyne, J.
- Gough, J., structure of blood vessels in cerebral tumours, III, 722.
- Gould, A. A. See Borsook, H.
- Gould, B. S., animal and plant tyrosinase; oxidation of mono- and di-hydroxy phenols as a function of temperature, III, 344.
- See also Sizer, I. W.
- Gould, J. H. See Hamilton, W. J.
- Gould, R. G., jun., and Jacobs, W. A., synthesis of substituted quinolines and 5:6-benzquinolines, II, 24.
- Gould, R. K., and Vosburgh, W. C., silver-silver iodide electrode, I, 362.
- Gould, S. P., final solubility of *d*-galactose in water, I, 355.
- Goulden, F. See Badger, G. M.
- Goulliart, M., crystalline form which precedes Teichmann's crystals in detection of hæmoglobin, III, 370.
- Gourevitch, A., fractional centrifuging as a means of separating the constituents of a mixture, I, 81.
- Gouzon, B. See Bierry, H.
- Govaert, F., and Hausseus, M., action of thionyl chloride and thionyl bromide on pentaerythritol, II, 117.
- See also Beyaert, M.
- Govaerts, A., and Delaune, R., effects of gymnastic lesson in man, III, 340.

- Govaerts, J., photographic method of studying β -ray absorption by ^{32}P , I, 278. Spontaneous activity of sympathetic ganglia isolated from central nervous system, III, 298.
- Govaerts, P., hypertensive effect of kidney, III, 293.
- and Muller, P., production of hypertension by transplanting a normal kidney into circulation of a nephrectomised dog, III, 191.
- Govindarajan, S. R. See Rao, S. R.
- Gowe, D. F. See Goldsmith, G. A.
- Gowen, J. W., size of tobacco mosaic particle from X-ray determinations, III, 690.
- and Lucas, A. M., reaction of variola vaccine virus to X-rays, III, 456.
- Goyan, F. M., Barnes, C. L., and Hind, H. W., universal pH meter and simplified vacuum-tube electrometer, I, 395.
- Graafland, C. A. See Touw, J. F.
- Grabar, P., Levenson, S., and Schneierson, S. S., fractional ultrafiltration of toxin of *Cl. perfringens*, types A and C, III, 611.
- See also Hornus, G., and Levenson, S.
- Grabbe, E. M., ferromagnetic anisotropy, magnetisation at saturation, and superstructure in Ni_3Fe and nearby compositions, I, 291.
- Grabe, B., and Hulthén, E., predissociation phenomena in spectrum of aluminium hydride, I, 191.
- Grabill, F. J. See Cooper, M. L.
- Grace, A. W., and Suskind, F. H., transmission of lymphogranuloma venereum to guinea-pig, III, 614.
- Grace, I., and Page, I. H., pathological anatomy of cellophane perinephritis, III, 586.
- Grace, N. H., vegetative propagation of conifers. I. Rooting of cuttings from upper and lower regions of a Norway spruce tree. II. Effects of nutrient solution and phytohormone dusts on rooting of Norway spruce cuttings. III. Effect of month of collection on rooting of dormant Norway spruce cuttings. IV. Effects of cane sugar, ethyl mercuric phosphate, and indolylacetic acid in tale dust on the rooting of Norway spruce, III, 82, 271, 365. Physiological activity of a series of indolyl acids, III, 271. Effects of plant and animal hormones on rooting of dust- and solution-treated dormant stem cuttings, III, 271. Physiological activity of a series of naphthyl acids, III, 271. Effects of plant and animal hormones on seeds damaged by formaldehyde, III, 271. Effect of dusts containing indolylbutyric acid and cestrone on rooting of dormant cuttings of *Lonicera tartarica*, III, 872.
- and Farrar, J. L., vegetative propagation of conifers. VI. Hormone solution and dust treatments of spruce cuttings propagated in greenhouse and outside frames, III, 872.
- Grace, W. H., Harrison, C. V., and Davie, T. B., adrenal hæmorrhage in meningococcal septicæmia, III, 895.
- Gradinesco, A., and Degan, C., the spleen and protein catabolism, III, 517.
- Gradle, H. S., tension tolerance [in eye], III, 891.
- Grady, H. G., and Stewart, H. L., origin of induced pulmonary tumours in strain A mice, III, 421.
- Graef, I., lipin pneumonia. I. Due to cod-liver oil. II. Due to liquid petrolatum, III, 105.
- Graeser, W. See Kröger, C.
- Graf, H. See Schenck, G.
- Graf, L. See Pacsu, E.
- Graf, O., specific action of cola on ability for physical work, III, 340.
- and Müller, E. A., influence of physical and mental states on pharmacological experiments on humans, III, 335.
- Graf, T., method of coincidences applied to determination of the efficiency of Geiger-Müller counters and to measurement of the specific ionisation of the β -radiation of 50 to 1000 ke.v., I, 89.
- Graff, E. See Hines, L. E.
- Graff, J. See Schiff, L.
- Graff, S., Rittenberg, D., and Foster, G. L., glutamic acid of malignant tumours, III, 590.
- Grafflin, A. L., cyst formation in glomerular tuft of the vertebrate kidney, III, 222. Thyroid and parathyroid glands of Virginia deer, III, 280. Cytological evidence of secretory activity in mammalian parathyroid, III, 726. Thyroid and parathyroid glands of deer, III, 836. Histological study of fat distribution in guinea-pig livers of chemically known fat content, III, 836.
- and Foote, J. J., epithelial cell shapes in first segment of the proximal tubule of cat nephron, III, 466.
- See also Marble, A.
- Gragerova, R. B., and Medvedeva, N. B., transformation of accumulated foreign proteins, introduced parenterally, III, 148.
- Gragert, O., treatment of female sterility, III, 661.
- Graham, C. H., and Bartlett, N. R., influence of area on foveal intensity discrimination, III, 892.
- See also Gagné, R. M.
- Graham, C. L., and Lambert, R. H., [apparatus for] periodic discharging of liquids and intermittent washing of solids, I, 84.
- See also Washburn, E. R.
- Graham, J. D. P., air stream in lung of fowl, III, 105. *Cratægus oxyacantha* in hypertension, III, 250. Respiratory reflexes in fowl, III, 387. [Pharmacological] actions of *Cratægus oxyacantha*, III, 682.
- and Gurd, M. R., effect of ephedrine on toxicity of local anæsthetics, III, 863.
- and Lazarus, S., action of the synthetic antispasmodics, "trasentin" and "trasentin-6H," III, 863.
- Graham, J. W., nicotinic acid in radiation sickness, III, 145.
- See also Fletcher, A. A.
- Graham, R., Hester, H. R., and Levine, N. D., *Listerella* from premature bovine fetus, III, 264.
- Graham, R. R. See Campbell, W. R.
- Graham, S. See Golla, F. L.
- Graham, T. N., metabolic cutaneous calcinosis (case with scleroderma), III, 675.
- Grahame, D. C., and Rollefson, G. K., high-temperature photolysis of acetaldehyde, I, 170.
- and Seaborg, G. T., separation of radioactive substances without the use of a carrier, I, 392.
- Grabe, K., counter-rotation of eyes and position of otoliths in man, III, 119.
- Gralén, N., splitting of hæmoglobin by acids, III, 184.
- and Svedberg, T., soluble reserve carbohydrates in *Liliifloræ*, III, 549.
- See also McCalla, A. C.
- Gramberg, W. See Hess, K.
- Gramiccia, G., blood of pigeons with beriberi, III, 428.
- Gramkee, B. E. See Hess, C. B.
- Gramling, L. G. See Foote, P. A.
- Grammaticakis, P., preparation of α -alkyl- and α -acyl-phenylhydrazones, and α -alkylphenylhydrazines, II, 131. Preparation of α - and β -alkylphenylhydrazines, II, 165. Action of organomagnesium compounds on araldoximes and their derivatives; preparation of arylalkylamines of type $\text{NHR} \cdot \text{CHR}_2$, II, 273. Ultra-violet absorption spectra and formation of indole and indolenine derivatives, II, 288.
- See also Biquard, (Mlle.) D.
- Grams, L. R., intracapsillary microscopic metastatic mammary gland carcinoma of the lungs and other viscera, III, 229.
- Grana, A. See Varela-Fuentes, B.
- Granaat, D., pupil reaction during time of ingestion, III, 25.
- Grand, C. G., and Chambers, R., neoplasm. VII. Granulocytes in regressing transplants of spontaneous mouse tumours, III, 815.
- Grand, M. J. H. See Barenberg, L. H.
- Grandjean, J. See Swings, P.
- Granel, F., sensitivity of the epoophoron to testosterone; colchicine reaction, III, 308.
- Granger, B. See Adams, A. E.
- Granick, S., and Michaelis, L., radical of tri-*p*-tolylamine, II, 339.
- Michaelis, L., and Schubert, M. P., semiquinones of oxazines, thiazines, and selenazines, II, 332.
- See also Michaelis, L.
- Granit, R., and Helme, T., changes in retinal excitability due to polarisation: relation between the processes in retina and nerve, III, 25.
- Granovski, B. L., diffusion of ions in a discharge and initial rate of gas deionisation. I. and II., I, 2.
- Granskaja, T. A. See Dumanski, A. V.
- Grant, F. C. See Weinberger, L. M.
- Grant, K., spectroscopic power of human eye due to injury, III, 114.
- Grant, W. M. See Hanna, G. D.
- Granzner, O. See Wense, T.
- Gratama, K. See Wibaut, J. P.
- Gratia, A., inhibiting effect of electrolytes on fixation of bacteriophages by sensitive bacteria, III, 357. Minimum fixation of bacteriophage on a sensitive strain of *B. castellani*, III, 357. Toxicity of sodium and potassium ions to bacteriophages, III, 542. Antagonistic action of alkaline-earth ions on toxicity of ions of sodium and potassium towards bacteriophage, III, 542. Antagonistic effect of calcium on toxicity of potassium on bacteriophage of *B. megatherium*, III, 690.
- and Welsch, M., liberation of bacteriophage bound to organism, III, 613.
- Grafon, L. C., nature of the ore-forming fluid, I, 379.
- Grattan, J. F. See Jensen, Hans.
- Graubard, M. See Pincus, G.
- Grabner, W. See Mancini, M. A.

- Grauer, R. C. See Starkey, W. F.
 Graul, J. See Nagle, N.
 Graulich, W. See Krollpfeiffer, F.
 Graves, (Miss) E. R., energy release from ^9Be (d, α) ^7Li and the production of ^7Li , I, 308.
 See also Allison, S. K.
 Graves, N. R. See Vaughan, W. E.
 Graves, R. R. See Sweet, W. W.
 Graves, R. W. See Woodhall, B.
 Gray, A. G. See Holt, M. L.
 Gray, C. H. See Drummond, J. C.
 Gray, E. LeB., comparison of vitamin-A and -A₂ by distillation, III, 143.
 and Cawley, J. D., influence of structure on elimination maximum. I. Structure of vitamin-A₂, III, 749.
 Hickman, K. C. D., and Brown, E. F., state of vitamin-A in the liver of the rat after feeding various forms of the vitamin, III, 511.
 Gray, H., dysmenorrhoea relieved by thyroid, III, 661.
 and Faber, H. K., individual growth records of two healthy girls from birth to maturity, III, 621.
 Gray, I., Greenfield, I., and Lederer, M., benzene poisoning, III, 604.
 Harten, M., and Walzer, M., allergic reaction in passively sensitised mucous membranes of ileum and colon in man, III, 664.
 and Walzer, M., absorption of protein introduced by tube into human duodenum, III, 38. Absorption of protein from the rectum; comparative study of absorption following oral, duodenal, and rectal administrations, III, 664.
 See also Cohen, L.
 Gray, J., kinetics of locomotion of *Nereis diversicolor*, III, 297.
 Gray, J. H., regeneration of lymphatic vessels, III, 463.
 Gray, J. S., and Bachrach, W. H., effects of atropine and fat on gastric secretion stimulated by alcohol, III, 500.
 Culmer, C. U., Wiczorowski, E., and Adkison, J. L., preparation of pyrogen-free urogastrone, III, 584.
 Wiczorowski, E., and Ivy, A. C., inhibition of gastric secretion by extracts of normal male urine, III, 34.
 See also Culmer, C. U., Dragstedt, C. A., and Loew, E. R.
 Gray, L. A. See Brack, C. B.
 Gray, L. H., and Read, J., quantitative comparison of biological effects of neutrons and other ionising radiations, III, 159. Measurement of neutron dose in biological experiments, III, 159.
 Gray, P. A., and Moffat, W. M., co-existence of diabetes mellitus and diabetes insipidus, III, 899.
 Gray, P. H. H., *Vibrio amylocella*, n. sp., a soil organism which decomposes cellulose and produces glucose from starch, III, 74.
 Gray, R. C., optical anisotropy of cellulose sheet, I, 197.
 Gray, S. J., colloidal gold curve of blood serum in liver disease, III, 40. Colloidal gold reaction of blood serum in liver disease, III, 502.
 Gray, S. W., and Ford, W., effect of crustacean eye-stalk hormone on water metabolism and melanophore expansion in the frog, III, 405.
 Gray, W. D., relation of p_{H} and temperature to fruiting of *Physarum polycephalum*, III, 450.
 Graybiel, A., diseases of heart, III, 632.
 See also McFarland, R. A.
 Grayman, I., Nelson, N., and Mirsky, I. A., utilisation of acetone bodies. II. Influence of sex, III, 150.
 See also Nelson, N.
 Graymore, J. See Blundell, R.
 Greathouse, G. A., alkaloids from *Sanguinaria canadensis* and their influence on growth of *Phymatotrichum omnivorum*, III, 549. Conductivity of plant sap, III, 939.
 Greaves, J. D., Freiberg, I. K., and Johns, H. E., preparation and assay of anterior pituitary fractions rich in ketogenic and respiratory quotient-reducing substances, III, 495.
 Jones, L., and Anderson, A., influence of amino-acids and proteins on nitrogen fixation by *Azotobacter chroococcum*, III, 539.
 See also Young, S. M.
 Grebennik, L. I., influence of acidic and basic diets on the animal organism. IV. Relation between effect of basic and acidic diets and season, III, 47.
 Grebinski, S. O., biochemical features of alpine fodder plants, III, 270. Ripening process in separate parts of fruit [apples], III, 614.
 Greco, A., pharmacology of Sicilian plants. II. Pharmacognosy of achenes of *Adonis cupaniana*, Guss., III, 333. Structure and composition of achenes of *Adonis cupaniana*, Guss., III, 924.
 Greco, D., effect of nicotinic acid on blood-sugar, III, 51.
 See also Morelli, A.
 Greco, J. B., use of honey in laevulose tolerance test, III, 434.
 Greco, P. A. See Emery, F. E.
 Grecu, A., Gruia-Ionescu, N., Claudian, I., and Constantinescu, P., treatment of pellagra in Rumania by nicotinic acid, III, 429.
 Greeley, P. O., sugar utilisation of hypophysectomised rabbits, III, 847. Duration of insulin action, III, 898.
 See also Deuel, H. J., jun., Drury, D. R., and Tyler, D. B.
 Green, A. A. See Drinker, N.
 Green, B. H. See Block, L. H.
 Green, B. S. See King, J. T.
 Green, C. A., preparation of hæmolytic streptococcal endotoxin, III, 265.
 Green, D. E., Herbert, D., and Subrahmanyam, V., isolation and properties of co-carboxylase, III, 931.
 See also Gordon, A. H., Herbert, D., Subrahmanyam, V., and Williamson, S.
 Green, D. F. See Morris, M. L.
 Green, E. L., inheritance of a rib variation in rabbit, III, 3.
 Green, G. K., and Kruger, P. G., energy variations in a cyclotron ion beam, I, 395.
 Green, H. See Gross, R. E.
 Green, Henry, effect of sulphapyridine on growth *in vitro* of tubercle bacillus, III, 677.
 Green, H. D. See Gregg, D. E.
 Green, H. N., action of sulphanilamide: bacterial growth-stimulating factor ("P" factor) obtained from *Br. abortus* and other bacteria, III, 436.
 Green, H. W. See Eden, A.
 Green, J. B., Bowman, D. W., and Hurlburt, E. H., Zeeman effect in krypton and xenon, I, 399.
 Green, J. B., and Loring, R. A., thermostat for room temperature control, I, 175. Zeeman effect of selenium II, I, 335.
 See also Maxwell, H. N.
 Green, L., effect of iodine iontophoresis in actinomycosis, III, 678.
 Green, M. E., and Snow, J. S., thiocyanate dermatitis, III, 65.
 Green, M. W., determination of acetone, II, 146.
 Green, N. D. See Brown, J. B.
 Green, R. See Necheles, H.
 Green, R. G., Goodlow, R. J., Evans, C. A., Peyton, W. T., and Titrud, L. A., transmission of a human papilloma to monkeys, III, 815.
 Green, W. P., jun. See Davis, T. L.
 Green, W. R., modifying *Drosophila* by selection, III, 875.
 Green, W. W., chemistry and cytology of sperm membrane of sheep, III, 782.
 Greenberg, A. L., and Walden, G. H., jun., equilibrium of solid solutions in ionic lattices; systems $\text{KMnO}_4\text{-KClO}_4\text{-H}_2\text{O}$ and $\text{NH}_4\text{Cl-MnCl}_2\text{-H}_2\text{O}$, I, 441.
 Greenberg, A. W., action of electric current on respiratory and circulatory organs. I. Respiratory organs, III, 478.
 Greenberg, B. See Noble, G. K.
 Greenberg, D. M., and Campbell, W. W., mineral metabolism with aid of induced radioactive isotopes. IV. Manganese, III, 860.
 and Larson, C. E., relationship of calcium proteinate and colloidal calcium phosphate to partition of calcium in blood, III, 288.
 and Weitman, H. G., determination of serum-phosphatase activity with disodium phenyl phosphate, III, 536.
 and Winnick, T., plant proteases. I. Activation-inhibition reactions. II. p_{H} -activity curves. III. Kinetic properties, III, 931.
 See also Austoni, M. E., Campbell, W. W., Glazko, A. J., Kleiber, M., and Winnick, T.
 Greenberg, L. A. See Haggard, H. W.
 Greenberg, L. D., and Rinkhart, J. F., effect of thiol and other reducing compounds on decarboxylation of pyruvic acid by alkaline washed yeast, III, 767.
 Greenberg, S., and Mallozzi, E. D., poison ivy sensitivity, III, 938.
 Greenberg, S. M. See Fraps, G. S.
 Greenberg, S. S. See Perla, D.
 Greenblatt, I. J., and Pecker, A., effect of ascorbic acid on iminazole rings and allied substances *in vivo*, III, 674.
 Greenblatt, M. See Canzanelli, A.
 Greenblatt, R. B., testosterone propionate and premenstrual tension, III, 902.
 Greenburg, L., Mayers, M. R., Goldwater, L., and Smith, A. R., benzene poisoning in rotogravure printing industry in New York City, III, 68.
 Mayers, M. R., and Smith, A. R., systemic effects from exposure to certain chlorinated hydrocarbons, III, 254.
 Greene, B. L., and Bloch, L. H., calcium gluconate and kaolin in treatment of bacillary dysentery, III, 63.
 Greene, C. H., and Farrell, E., liver and biliary tract, III, 666.
 Hotz, R., and Leahy, E., blood-cholesterol esters in liver disease, III, 706.
 Greene, D. See Barenberg, L. H.

- Greene, H. S. N., familial mammary tumours in rabbit. I. Clinical history. II. Gross and microscopic pathology. III. Factors concerned in genesis and development. IV. Evolution of autotomy in course of tumour development as indicated by transplantation experiments, III, 228, 506. Dwarf mutation in rabbit; constitutional influence on homozygous and heterozygous individuals; [relation to endocrines], III, 894.
- Greene, J. See Bonner, J.
- Greene, J. A., and January, L. E., efficacy of pellets of posterior hypophysis and of pitressin in oil in diabetes insipidus, III, 732.
- Levine, H., and Johnston, G. W., is potassium tolerance curve of value in diagnosis of adrenal cortical insufficiency in man? III, 897.
- and Thatcher, O. J., resistance to protamine-zinc-insulin, III, 413.
- See also Van Epps, E. F.
- Greene, R. A., and Breazeale, E. L., preparations from spinal cord in laboratory diagnosis of rabies, III, 21. Zone reactions in the Kline test, III, 79.
- Breazeale, E. L., and Croft, C. C., quantitative study of syphilitic serum, III, 688.
- Greene, R. R., and Burrill, M. W., lack of androgenic activity of deoxycorticosterone acetate, III, 643. Recovery of testes after androgen-induced inhibition, III, 648. Androgenic function of [anterior pituitary-like hormone] stimulated ovaries in immature rats, III, 658. Maintenance of gestation in castrate pregnant rat with androgens, III, 661.
- Burrill, M. W., and Ivy, A. C., effect of antenatal androgens on sexual development of female rats, III, 646. Oestrogen-induced hypospadias in the female rat, III, 652. Experimental intersexuality: paradoxical effects of oestrogens on sexual development of female rat, III, 658. Experimental intersexuality: effects of oestrogens on antenatal sexual development of rat, III, 874.
- Burrill, M. W., and Thomson, D. M., androgenicity of progesterone, III, 904.
- See also Burrill, M. W., Ivy, A. C., Nelson, D., and Wigodsky, H. S.
- Greenebaum, R. S. See Fantus, B.
- Greenfield, D. See Meltzner, M.
- Greenfield, I. See Gray, I.
- Greenfield, J., bronchial calibre changes in bronchiectasis, III, 887.
- and Curtis, G. M., acute suppurative thyroiditis during childhood, III, 407.
- Greenfield, J. G., and Turner, J. W. A., acute and subacute necrotic myelitis, III, 298.
- See also Fitzgerald, G. M.
- Greengard, H., and Burt, G. J., colloidal sulphur to modify extirpation diabetes, III, 239.
- and Woolley, J. R., colloidal sulphur-polysulphide mixture; absorption and oxidation after oral administration, III, 241. Colloidal sulphur-polysulphide mixture. I. Toxicity, III, 864.
- See also Hurd, C. D.
- Greenhill, J. P., and Freed, S. C., mechanism and treatment of premenstrual distress with ammonium chloride, III, 661.
- Greenstein, J. P., and Edsall, J. T., effect of denaturing agents on myosin. I. Sulphydryl [thiol] groups as determined by porphyrindin titration, II, 239.
- Greenstein, N. M. See Barenberg, L. H.
- Greenthal, R. M., and Epstein, E., adrenal neuroblastoma, III, 30.
- Greenwald, C. K. See Fisher, A. E.
- Greenwald, I., Redish, J., and Kibrick, A. C., dissociation of calcium and magnesium phosphates, I, 412.
- Greenwald, L., and Burrett, J. B., sickle-cell anaemia in white family, III, 703.
- Greenwood, J. H. See Kaump, D. H.
- Greenwood, J. N., and Warner, H. W., constitution of dilute alloys of lead with sulphur, selenium, and tellurium, I, 20.
- Greenwood, W. F., Nassim, R., and Taylor, N. B., production of hypertension by prevention of kidney hypertrophy, III, 192.
- Greep, R. O., effects of digested pituitary extract on reproductive tract of hypophysectomised adult male rats, III, 401. Separation in nearly pure form of luteinising (interstitial cell-stimulating) and follicle-stimulating (gametogenic) hormones of pituitary gland, III, 494. Pituitary function in parabiotic triplet rats, III, 729.
- See also McKee, C. M.
- Gregg, A. H. See Lunt, R. W.
- Gregg, D. C., and Miller, W. H., laccase from wild mushroom, *Russula foetens*, III, 765.
- Gregg, D. E., and Green, H. D., phasic blood flow in coronary arteries obtained by a new differential manometric method, III, 15.
- Thornton, J. J., and Mautz, F. R., magnitude, adequacy, and source of collateral blood flow and pressure in chronically occluded coronary arteries, III, 99.
- Gregg, L. A., Loosli, C. G., and Hamburger, M., jun., sulphapyridine in experimental lobar pneumonia in dog, III, 59. Sulphapyridine in experimental pneumococcal pneumonia in the dog, III, 244.
- Grégoire, R. See Auger, P.
- Gregory, A. S. See Wolfrom, M. L.
- Gregory, W. K., and Hellman, M., upper dental arch of *Plesianthropus transvaalensis*, Broom, and its relations to other parts of the skull, III, 625.
- Greninger, A. B., and Troiano, A. R., crystallography of austenite decomposition, I, 432.
- Gresham, T. L. See Stiehler, R. D.
- Gresson, R. A. R., presence of sperm middle-piece in fertilised egg of mouse, *Mus musculus*, III, 583. Cytological study of centrifuged oocytes of mouse, III, 623.
- Grether, W. F., chimpanzee colour vision, III, 803.
- Gretschuschnikov, A. I., variation of cystoamylase in potato due to different conditions of growing, III, 363. Rôle of peroxidase in immunity against *Phytophthora infestans*, de Bary, III, 367.
- Greulich, W. W., and Thoms, H., X-ray study of male pelvis, III, 551.
- Greval, S. D. S., and Chandra, S. N., blood groups of communities in Calcutta, III, 838.
- Greville, G. D., Jones, T. S. G., and Hughes, W. F. G., water metabolism in essential epilepsy. I. Water balance. II. Water content of blood, III, 721.
- Gridgeman, N. T., Lees, H., and Wilkinson, H., effect of basal diet on biological assay of vitamin-A, III, 673.
- Griebel, action of vitamin-C in tuberculosis of the larynx, III, 515.
- Grieve, J., and White, J., systems MnO-TiO₂, and MnO-FeO-TiO₂, I, 257.
- Grieve, J. G., and McDermott, J. G., congenital atresia of oesophagus in two brothers, III, 782.
- Griffel, M. See Kuck, J. A.
- Griffin, A. M. See Stuart, C. A.
- Griffin, D. B. See Hall, R. T.
- Griffith, F. R., jun., Lockwood, J. E., and Emery, F. E., adrenaline lactacidemia, III, 408. Calorigenic action of adrenaline, III, 498. Effect of adrenaline on pulmonary ventilation, III, 728.
- See also Bunnell, J.
- Griffith, H. D. See Thomson, A. M.
- Griffith, H. R. See Leech, B. C.
- Griffith, J. Q., jun., and Comroe, B. I., reduced tolerance to ergotamine tartrate in hyperthyroidism, III, 683.
- and Ingle, D. J., blood volume in experimental hypertension following subtotal nephrectomy; effect of posterior pituitary lobectomy, III, 842.
- See also Edeiken, J.
- Griffith, R. See Price, D.
- Griffith, R. O., and McKeown, A., kinetics of reaction of iodine with phosphorous acid and with phosphites, I, 365.
- McKeown, A., and Taylor, R. P., kinetics of the reaction of iodine with hypophosphorous acid and with hypophosphites, I, 364.
- Griffith, W. H., choline metabolism. III. Effect of cystine, fat, and cholesterol on haemorrhagic degeneration in young rats. IV. Relation of age, weight, and sex of young rats to occurrence of haemorrhagic degeneration on low-choline diet, III, 327, 860.
- and Wade, N. J., relation of methionine, cystine, and choline to renal lesions occurring on low-choline diets, III, 41. Choline metabolism. I. Occurrence and prevention of haemorrhagic degeneration in young rats on a low-choline diet. II. Interrelationship of choline, cystine, and methionine in the occurrence and prevention of haemorrhagic degeneration in young rats, III, 149, 327.
- Griffiths, D. G. See Kidd, F.
- Griffiths, E. See Awbery, J. H.
- Griffiths, J. C., and Stuart, A., occurrence of detrital diaspore in South Wales, I, 380.
- Griffiths, J. O. See Boles, R. S.
- Griffiths, M., relationship between secretory cells of pars nervosa of hypophysis and classical neuroglia, III, 731.
- and Young, F. G., does the hypophysis secrete pancreotropic hormone? III, 807.
- Griffiths, W. F. B. See Amoroso, E. C.
- Griffiths, W. J. See Card, W. I.
- Griggs, D. T. See Hurlbut, C. S., jun.
- Grigoraki, L., and David, Roger, biochemical characters of *Trichophyton granulatum* (Pégus 1909), III, 262. Biochemical characters of *Microsporium gypsum* and *fulvum*, III, 264. Biochemical characters of *Trichophyton radicans* (Sabourand, 1909), III, 451.
- Grigoriev, D. P., and Schafranovski, I. I., crystallographic investigation of artificial mullite, I, 35.

- Grim, R. E., and Bradley, W. F., effect of heat on clay minerals illite and montmorillonite, I, 397.
- Grimaldi, A. A. See Grimaldi, F. E.
- Grimaldi, F. E., and Grimaldi, A. A., sulphanilamide in gonorrhoea, III, 60.
- Grimalsch, V., and Hohor, V., salt content of the Raselm lakes, I, 135.
- Grimberg, A., phosphocreatinemia in uraemia, III, 138.
- Grimm, H. See Ziegler, K.
- Grimm, L. See Klemm, W.
- Grimmer, R. V., Hesser, F. H., and Langworthy, O. R., rhythmic variations of respiratory excursions with bilateral injury of cortical efferent fibres, III, 299.
- Grimmett, L. G., and Herford, G. V. B., effects of γ -radiation on grain weevil, III, 342.
- Grinshaw, D. C., Guy, J. B., and Smith, J. C., addition of hydrogen bromide to non-terminal double bonds; the isopropylidene group; crotonic acid, II, 118.
- Grimson, K. S., rôle of sympathetic nervous system in experimental neurogenic hypertension, III, 711.
- Bouckaert, J. J., and Heymans, C., production of sustained neurogenic hypertension of renal origin, III, 102.
- and Shen, T. C. R., vasomotor responses to adrenaline and to carotid sinus impulses in normal, skinned, and denervated legs, III, 101.
- See also Derom, E., and Goormaghtigh, N.
- Grinberg, A. P., and Roussinov, L. I., structure of lower excited levels of ^{80}Br nucleus, I, 384.
- Grinberg, F. L. See Gabel, J. O.
- Grindlay, J. H., Herrick, J. F., and Baldes, E. J., rhythmicity of spleen in relation to blood flow, III, 100.
- Herrick, J. F., and Mann, F. C., measurement of blood flow of spleen, III, 100.
- Grinnell, S. W. See Irving, L., and Koenig, F. O.
- Grisewood, E. N. See Bacon, R. H.
- Grishaw, W. H., West, H. F., and Smith, B., juvenile diabetes mellitus, III, 239.
- See also Smith, B.
- Griswold, J., Andres, D., Arnett, E. F., and Garland, F. M., liquid-vapour equilibrium of the system aniline-water, I, 322.
- Griwet, T. See Auger, P.
- Groat, R. A., new mounting media, III, 5.
- Grobstein, C., and Bellamy, A. W., effects of feeding thyroid to immature fishes, III, 122.
- Groen, P. See Sizoo, G. J.
- Groggins, P. H., 2-o-aminophenylanthraquinone and 1:2-phthaloylcarbazole, II, 97.
- Groll, H. P. A. See Burgin, J.
- Grollman, A., comparative activity of deoxycorticosterone and other crystalline derivatives and of purified extracts of the adrenal cortex, III, 158.
- Williams, J. R., jun., and Harrison, T. R., preparation of renal extracts capable of reducing blood pressure of animals with experimental renal hypertension, III, 666.
- Therapeutics of experimental hypertension, III, 680.
- Effect of various sterol derivatives on blood pressure of rat, III, 680.
- See also Flexner, L. B., and Gersh, I.
- Gromiko, E. P. See Rishkov, V. L.
- Gromov, B. V., equilibria in the system $\text{PbSO}_4\text{-NaCl-H}_2\text{O}$, I, 390.
- Complex formation in the system $\text{PbCl}_2\text{-NaCl-H}_2\text{O}$, I, 390.
- Gronau, A. See Eaton, M. D.
- Grondahl, J. W., and Haney, H. F., attempt to produce experimental cardiospasm in dogs, III, 741.
- Groner, M. G., sugar excretion in *Impatiens sultani*, III, 458.
- Groome, J. R., action of androgenic substances on immature female rat and guinea-pig, III, 902.
- See also Zuckerman, S.
- Gros, L., balance for automatic evaporation, I, 176.
- Gros, R. See Cattelain, E.
- Groschev, L. V., probability of pair production in nitrogen by γ -rays, I, 306.
- Angular distribution and nuclear impulse for pairs in nitrogen, I, 307.
- Groschkov, G. V. See Liatkovskaja, N. M.
- Grose, E. F., and Korschunov, A. V., low frequency scattering spectra in *para*-, *meta*-, and *ortho*-di-iodobenzenes, I, 9.
- and Raskin, A. I., nature of the low-frequency Raman spectrum and spectrum of hexamethylbenzene crystal, I, 8.
- Grosheintz, J. M., oxidation of glucosides by lead tetra-acetate in aqueous solution, II, 67.
- See also Baer, E.
- Grosjean, M. See Périer, A.
- Gross, E. O., and Thompson, V., excretion of a combined form of morphine in tolerant and non-tolerant dogs, III, 524.
- See also Slaughter, D., and Winter, C. A.
- Gross, E. M. See Fieser, L. F.
- Gross, E. R. See Klauder, J. V.
- Gross, F., Matthes, K., and Gopfert, H., reactions of peripheral circulation in man, III, 842.
- See also Matthes, K.
- Gross, F. (Göteborg), osmotic relations of the plankton diatom *Ditylum brightwelli* (West.), III, 351.
- Gross, H., water content of myocardium in hypertrophy and chronic congestive failure, III, 632.
- and Engelberg, H., essential hypertension: comparison of hypertensive and non-hypertensive phases following coronary thrombosis, III, 566.
- and Philips, B., complete occlusion of abdominal aorta, III, 793.
- and Sternberg, W. H., myocardial infarction without coronary artery lesions, III, 15.
- Gross, P., Cooper, F. B., and Lewis, M., type I pneumococcal meningitis in rats; comparative therapeutic results obtained with sulphanilamide, serum, and combination therapy, III, 243.
- See also Cooper, F. B.
- Gross, P. M. See Hobbs, M. E., and Maryott, A. A.
- Gross, R. E., neoplasms producing endocrine disturbances in childhood, III, 724.
- Emerson, P., and Green, H., surgical obliteration of patent ductus arteriosus in 7-year-old girl, III, 632.
- Gross, S. W., cerebral arteriography in dog and man with a rapidly excreted organic iodide, III, 100.
- Grosse, A. V., and Booth, E. T., radioactive zirconium and niobium from uranium fission, I, 279.
- Grosse, A. V., and Mavity, J. M., organo-aluminium compounds. I. Preparation, II, 158.
- Rosenbaum, E. J., and Jacobson, H. F., identification of paraffins; analysis of paraffinic mixtures by means of Raman spectra, II, 240.
- Wackher, R. C., and Linn, C. B., physical properties of alkyl fluorides and comparison of alkyl fluorides with other alkyl halides and with alkyls of the elements of period II, I, 202.
- See also Booth, E. T., and Nier, A. O.
- Grosse-Brockhoff, F., and Mundt, E., respiration in Graves' disease, III, 122.
- Grossman, A. J. See Smyth, C. P.
- Grossman, A. M., vitamin-K for pediatrician [physiologic hypoprothrombinemia of newborn infants], III, 469.
- See also Quick, A. J.
- Grossman, L. I., present status of pulpless tooth, III, 745.
- Grossman, M. I. See Wikoff, H. L.
- Grossmann, M., and Benzon, B., action of helborsid in cardiac failure, III, 679.
- Grote, F., treatment of hormonal deficiencies, III, 206.
- Grote, L. R., compensatory mechanisms in circulatory diseases, III, 189.
- Therapeutic action of fasting, III, 229.
- Grotepass, W., porphyrin in normal blood corpuscles, III, 472.
- Groth, W., and Harteck, P., enrichment of krypton isotopes by the separation tube process, I, 263.
- Groulx, A., elimination of smallpox in Montreal by vaccination, III, 544.
- Groven, L., X-rays emitted by rarefied gases excited by an electric discharge, I, 305.
- Grover, D. W., vapour pressure of glycerin, I, 406.
- and Nicol, J. M., vapour pressure of glycerin solutions at 20°, I, 406.
- Groves, L. G., and Martin, A. E., dielectric constant of diamond, I, 244.
- Grozin, M., diphtheria scratch test, III, 168.
- Grubbs, D. M. See Croneis, C.
- Grube, G., and Croatto, U., polarisation of electrolytic hydrogen evolution from nickel-iron and nickel-cobalt alloys in alkaline solution, I, 220.
- and Flaad, M., reduction equilibrium of chromic oxide, I, 216.
- Kubaschewski, O., and Zwiauer, K., reduction of niobium pentoxide by hydrogen, I, 265.
- and Nann, H., lower stages of oxidation of ruthenium in hydrochloric acid solution, I, 262.
- Hydrate isomerism and hydrolysis of ruthenium trichloride, I, 266.
- Oestreicher, E., and Winkler, O., system copper-manganese, I, 107.
- and Ratsch, K., preparation of solid chromium-nickel alloys by reduction of chromic oxide in presence of nickel, I, 216.
- and Speidel, H., electrodeless measurement of electrical resistance of metals and alloys at high temperature. I. Electrical resistance of manganese, I, 331.
- and Winkler, O., structure of the γ -mixed crystals in the system palladium-manganese; correction, I, 107.

- Gruber, C. M., Haury, V. G., and Drake, M. E., action of apomorphine on intact intestine of unanesthetized dogs, III, 134. Toxic actions of sodium diphenylhydantoinate (dilantin) when injected intraperitoneally and intravenously in experimental animals, III, 524.
See also Drake, M. E., and Gruber, C. M., *jun.*
- Gruber, C. M., *jun.*, and Gruber, C. M., action of thiocthamyl, thiopentobarbital, pentobarbital, and evipal on small intestine, III, 251. Cardiac vagus nerve of frog as affected by sodium *N*-hexylethylbarbiturate (ortal), III, 792.
- Gruber, Z. von. See Gömöri, P.
- Grudkova, L. I. See Borakso, C. I.
- Grünbaum, A. See Snapper, I.
- Grünberg, A. A., and Filinov, P. M., application of artificial radio-elements to elucidation of problems of complex chemistry, I, 30.
- Laurentiev, V. N., and Ptitzin, B. V., oxidation-reduction potentials of complex ammoniates of platinum, I, 295.
- Grüneberg, H., and Haldane, J. B. S., congenital hyperglycemia in mice, III, 707.
- Hallpike, C. S., and Ledoux, A., structure, development, and electrical reactions of the internal ear of the shaker-1 mouse (*Mus musculus*), III, 804.
- and Lea, A. J., inherited jaw anomaly in long-haired dachshunds, III, 279.
See also De Beer, G. R., and Engel, S.
- Grüneis, P., and Pilgerstorfer, E., anaemia in lambliosis, III, 181.
- Grüneisen, E., and Erding, H. D., thermal resistance of pure beryllium crystals and its variation in a transverse magnetic field, I, 103.
- Grüner, A. See Schubert, G.
- Grünwald, K. See Wagner, C.
- Gruenwald, P., mechanism of kidney development in human embryos as revealed by agenesis of ureteric buds, III, 552.
- Gruia-Ionescu, N., Claudiu, I., and Constantinescu, P., histidine treatment of pellagra, III, 429. Urinary excretion of nicotinic compounds in inhabitants of pellagrous districts in Rumania, III, 429.
See also Grecu, A.
- Grulee, C. G., and Mason, J. T., [sulphamethylthiazole] treatment of furunculosis, III, 756.
- Grumbach, A., and Millet, R., fluorescence of sodium formate in sodium hydroxide solution, I, 147.
- Grumbach, M. L. See Macht, D. I.
- Grumbrecht, P., and Loeser, A., synthetic oestrogens, III, 129. Liver damage after oral administration of oestrogenic substances, III, 665.
- Grumer, J. See Niederl, J. B.
- Grund, J. L., erythema of ninth day following bismuth therapy for syphilis, III, 681.
- Grundfest, H., properties of mammalian B [nerve] fibres, III, 197.
See also Gasser, H. S.
- Grundland, I. See Bulliard, H.
- Grundström, B., band spectrum of indium hydride, I, 7. "Surplus" terms in [spectra of] hydrides, I, 310.
- Gruner, J. W., formation and stability of muscovite in acid solutions at elevated temperatures, I, 136. Behaviour of serpentines between 500° and 650°, I, 182.
See also Lindner, J. L., and McConnell, D.
- Gruner, O. C., experience with Pfeiffer crystallisation method for diagnosis of cancer, III, 855.
- Gruner, R., increase of temperature of subcutaneous tissues in baths, III, 158.
- Grunke, W., action of heparin and toluidine-blue on blood coagulation, III, 881.
See also Brugsch, T.
- Gruzewska, Z., and Roussel, G., determination of magnesium in [animal] organs, III, 780.
- Gualtierotti, T., and Capraro, V., effect of temperature on current of action in tibial muscle of *Hydrophylus piceus*, III, 713.
See also Capraro, V.
- Guardabassi, L. See Camerini, R.
- Guareschi, C., structure of nuclei of labial glands of *Chironomus* and effect of surrounding medium, III, 626.
- Gubareva, M. A. See Sirkin, J. K.
- Gubner, R., and Crawford, J. H., Roentgen-kymographic studies of cardiac infarction, III, 98.
See also Ungerleider, H. E.
- Gucker, F. T., *jun.*, and Pickard, H. B., heats of dilution, heat capacities, and activities of carbamide in aqueous solutions from the freezing points to 40°, I, 360.
- Gudjonsson, S. See Fridericia, L. S.
- Guénault, E. M., spectroscopic study of the combustion of methane, I, 76.
See also Lloyd, H.
- Guénin, J. See Péronnet, M.
- Günther, E. See Helferich, B.
- Günther, G. See Euler, H. von.
- Günther, H., proportions of giants, III, 622.
- Günther, J., use of albucid in gonorrhoea in general practice, III, 437.
- Günther, O. See Zeissler, R.
- Günther, P., and Gebert, F., comparative investigations of decomposition of azomethane by X-radiation and by light, I, 34.
- Haagen, E., and Gebert, F., irradiation of a tumour-producing filterable virus with X-rays, III, 509.
- and Holm, K., structure of solid hydrogen fluoride, I, 98.
- and Holzapfel, L., X-ray sensitivity of liquid water and ice, I, 124.
- Günther, P. L., formation of helium from α -radiators. II. Determination of the disintegration constants of uranium and radium, I, 185.
- and Rehaag, H., thermal decomposition of oxalates. II. Preparation of pure ferrous oxide, I, 129.
- Günther-Schulze, A., and Betz, H., temperature-dependence of diffusion constants of atomic hydrogen and protons in iron, I, 19.
- Guerard, C. R. See Wayburn, E.
- Guercio, F., and Cazzola, A., antagonodotropic activity and zoological specificity, III, 126. Effects of ovariectomy and splenectomy on properties of antagonodotropic rabbit's serum, III, 126. Antigonadotropic activity of blood serum after injection of gonadotropic hormones, III, 126. Antigonadotropic substances, III, 900.
- and Pezzini, Z. M., ergotamine and sympathetic stimulation, III, 199. Effect of ergotamine on blood pressure, III, 250. Uterine innervation, III, 659.
- Guéron, J. See Ochs, (Mlle.) L.
- Guerrant, N. B. See Frederick, C. A., Knight, C. A., and Ward, R. E.
- Gnerrini, G., action of light in photodynamic phenomena, III, 866.
- Guerry, D. See Waddell, W. W., *jun.*
- Guest, G. M. See Leva, E., and Rapoport, S.
- Guettel, C. L., photometric study of the lead-dithizone system at 610 m μ , I, 131.
- Güttner, W. See Eucken, A.
- Guggenheimer, E. A., the Helmholtz, I, 111. Thermodynamics of interfaces in systems of several components. I. and II., I, 159.
See also Fowler, R. H.
- Guggenheimer, K. M., series in nuclear energy levels, I, 144.
- Guha, B. C. See Banerjee, S., Ghosh, B., Pal, J. C., Saha, K. C., and Sen-Gupta, P. N.
- Guha, P. C., and Das Gupta, D., camphane series. V. Synthesis of Manasse's ketonic acid, C₁₀H₁₆O₃, from camphorquinone: 2:2:3-trimethylcyclohexan-4-onecarboxylic acid, II, 49.
- and Hazra, G. D., addition of aliphatic diazo-compounds to conjugated doubly linked systems; action of diazomethane and ethyl diazoacetate on cyclopenta- and cyclohexa-dienes and their derivatives, II, 87. Syntheses in the camphane series. V. Synthesis of diethyl [1, 2, 2]dicycloheptanedione-dicarboxylate from diethyl cyclopentanone-2:5-dicarboxylate, II, 255.
- and Kuppasami, A., thujane series. VIII. Syntheses of isothujone, II, 49.
- and Muthanna, M. S., thujane series. IX. Synthesis of umbellulonic acid. X. Total synthesis of thujone; synthesis of an isomeride (2-carboxy-2-isopropylcyclopropylacetic acid) of α -thujadiarboxylic acid, II, 86, 90.
- and Nande, M. S., thujane series. XI. Synthesis of an isomeride (1-isobutylcyclopropane-1:2-dicarboxylic acid) of α -thujadiarboxylic acid, II, 86.
- and Rao, P. L. N., pinane group. VI. Attempts to synthesise pinonic acid, nopinone, and verbenone. VII. Total synthesis of verbenone; total synthesis of α - and β -pinene, II, 86, 97.
- Guha, R. C., and Ahmad, B., vitamin-B₁ excretion of four healthy subjects living on different Indian diets, III, 322.
- Guichard, M. See Baxter, G. P.
- Guilbert, H. R., Howell, C. E., and Hart, G. H., minimum vitamin-A and carotene requirements of mammalian species, III, 511.
See also Goss, H.
- Guild, B. T., window patch test, III, 157.
- Guild, R. See Canzanelli, A.
- Guild, S. R. See Crowe, S. J.
- Guillaumie, M. See Weinberg, M.
- Guillemet, R., and Leroux, H., carbohydrate fermentation by yeast; fermentation of inulin without initial hydrolysis, III, 261.
- Guillet, L., preparation of metallic single crystals, I, 227.
- Guillien, R., dielectric constant near the m.p., I, 147.
- Guillissen, J. See Stahel, E.
- Guillot, N. See Bachrach, E.
- Guinau, O. A. See De Haas, W. J.
- Guinochet, M., changes in physico-chemical reactions of the plant cell due to substances which inhibit mitosis, III, 693.
See also Simonet, M.

- Guirdham, A., anterior pituitary extract in psychiatry, III, 493. Sex hormones in mental disorder, III, 657.
- Gukelberger, M., medical examination of sports prize contestants before and after long-lasting performances, III, 340.
- Guli, M. F., glycolytic enzymes of fatigued muscles of animals on acidic and basic diets, III, 73.
- Gulland, J. M., constitution of yeast ribonucleic acid; guanineuridylic acid, II, 235.
- and Hobday, G. I., constitution of yeast ribonucleic acid. IV. Syntheses of uridylic and guanylic acids, uridine 5-phosphate, and guanosine 5-phosphate, II, 291.
- and Jackson, (Miss) E. M., constitution of yeast-ribonucleic acid. III. Nature of the phosphatase-resistant group, II, 57.
- Partridge, M. W., and Randall, S. S., amino-acid and peptide esters of choline as possible analogues of the oxytocic hormone of posterior lobe of the pituitary gland. I., II, 245.
- See also Falconer, R.
- Gulliksen, D. P., Fogelberg, A., and Kardos, L., anorexia and gastric motility, III, 133.
- Gumbreck, L. G. See Biddulph, C.
- Gunde, B. G. See Hilditch, T. P.
- Gundry, L. P., bromide intoxication, III, 65.
- Gunn, F. D. See Bussabarger, R. A., Kepl, M., and Wright, J. L.
- Gunn, J. A., and Gurd, M. R., action of amines related to adrenaline; *cyclohexylalkylamines*, III, 441. Amines related to adrenaline, III, 895.
- Gunnison, J. B. See Marshall, M. S.
- Gunther, P. See John, W.
- Guntz, A. A., properties of singly distilled water with filtering of the vapour, I, 236.
- Gupta, D. D. See under Das Gupta, D.
- Gupta, J. See Mookerjee, (Miss) A.
- Gupta, J. C. S. See Basu, K. P.
- Gupta, K. See Basu, K. P.
- Gupta, T. N. S. See Nath, M. C.
- Gurd, M. R., and Sachs, I., effect of adrenaline on toxicity of local anaesthetics, III, 334.
- See also Graham, J. D. P., and Gunn, J. A.
- Gurevitch, I. See Alchazov, D., and Kleberg, J.
- Gurin, S., Bachman, C., and Wilson, D. Wright, homogeneity of gonadotropic hormone preparations isolated from pregnancy urine, III, 32. Gonadotropic hormone of pregnancy urine. II. Chemistry of preparations of high biological activity. III. Evidence of purity from electrophoresis and sedimentation, III, 581.
- and Hood, D. B., identification and determination of hexoses in polysaccharides and glycoproteins by the carbazole method, III, 84.
- Gurjanova, E. N., and Sirkin, J. K., dipole moments of phenyl iodo-dichloride and its derivatives, I, 58.
- Gurley, H. See Hepler, O. E.
- Gurney, S. W. See Downing, J. G.
- Gurruchaga, J. V., rôle of abdominal innervation in acute experimental intestinal obstruction, III, 534.
- Gurvitsch, J. G. See Fastovski, V. G., and Gonikberg, M. G.
- Gurwitsch, A., modulation of nerve by muscle, III, 196.
- Guseev, K. F., universal X-ray camera for structural analysis, I, 446.
- Guseva, A. See Schmuk, A.
- Gushovskaja, O. J., metal content of liver and bile of vertebrates. I., III, 665.
- Gusinskaja, S. L. See Naumov, S. N.
- Guss, L. S., and Kolthoff, I. M., ionisation constants of acid-base indicators in ethanol, I, 214. Distribution of protons between water and other solvents, I, 359.
- Gustafson, F. G., upward transport of minerals through the phloem of stems, III, 173. Auxin distribution in fruits: significance in fruit development, III, 459. Difficulties in extraction of growth hormones from plant tissues, III, 943.
- and Houghtaling, H. B., relation between fruit size and food supply in the tomato, III, 545.
- Gustavson, R. G. See Dittmer, K. H., Koenig, V. L., and Mason, L. W.
- Guterman, V. J. See Jermolenko, N. F.
- Guth, E., theory of emissivity of metals, I, 342. Theory of viscosity of suspensions of ellipsoidal particles, I, 357.
- and Gold, O., hydrodynamical theory of the viscosity of suspensions, I, 357.
- and Mayerhöfer, J., deviations from Ohm's law at high current densities, I, 311.
- See also Collins, G. B., and Dart, F. E.
- Guthrie, D., and Woodhouse, K. W., ethyl-ene anaesthesia, III, 862.
- Guthrie, F. C., modification of iodate method for determining barium, I, 329.
- Guthrie, J. D., inhibition of growth of buds of potato tubers with vapour of methyl naphthylacetate, III, 82. Control of bud growth and initiation of roots at cut surface of potato tubers with growth-regulating substances, III, 617.
- Gutiérrez-Díaz, J. M., and Rosa-Mato, F., biochemical study of higher fungi, III, 367.
- Gutman, A. B., Hogg, B. M., and Olson, K. B., increased serum-phosphatase activity without hyperbilirubinemia after ligation of hepatic ducts in dogs, III, 909.
- and Low, M., approximation of calculated to determined calcium content of human dietaries, III, 319.
- Olson, K. B., Gutman, E. B., and Flood, C. A., effect of disease of liver and biliary tract on phosphatase activity of serum, III, 220.
- See also Hanger, F. M.
- Gutman, E. B. See Gutman, A. B.
- Gutman, G. See Bauer, J.
- Gutman, M. R., treatment of deafness of otosclerotic origin, III, 205.
- Guttman, R., stabilisation of spider crab nerve membrane by alkaline earths, as shown by resting potential measurements, III, 530.
- Guttman, S. A., and Cattell, M., effects of digitoxin and potassium on striated muscle, III, 439.
- Guttmann, E., and Stokes, A. B., drugs in myotonia, III, 109.
- Guttmann, L., distribution of disturbances of sweat secretion after extirpation of sympathetic cervical ganglia in man, III, 802.
- Gutzeit, G., limit of perceptibility of a qualitative reaction in approximate determination of an element, I, 172.
- Guy, J. B. See Grimshaw, D. C.
- Guy, R. A., and Yeh, K. S., Peking diets. III. During dysentery, III, 591.
- Guy, W. H., Jacob, F. M., and Weber, F., synthetic tar paste, III, 61.
- Guyer, A., Bieler, A., and Orelli, E. von, solubility of alkali sulphates and carbonates in ammonia-water mixtures, I, 157.
- and Rufer, A., bromination of propane, II, 201.
- Guyer, M. F., and Claus, P. E., irradiation of cancer following injection of colchicine, III, 317. Destructive effects on carcinoma of colchicine followed by distilled water, III, 590.
- Guymon, J. F., relation of structure of sugars to chemistry of butyl alcohol-acetone fermentation, III, 353.
- Guyon, L., prostatic utricle in normal and castrated horses, III, 308.
- and Marza, V. D., potassium, rubidium, and caesium in well washed collagen clots, III, 626.
- Guzmán, J., periodic table, I, 311.
- Guzzi, L. See Bergami, G.
- Gvacharia, G. V., datolite from the Sogan-lug talus in neighbourhood of the town of Tbilissi, I, 86.
- Gwathmey, A. T., and Benton, A. F., experiments showing the directional reactivities of single crystals of copper, I, 123. Growth, orientation, and preparation of the surface of single crystals of copper, I, 170. Directional oxidation of a single crystal of copper by heating in air at reduced pressure, I, 286. Directional catalytic activity of a single crystal of copper, I, 366.
- Gwarkin, R. See Hadwen, S.
- Gwynn, C. A., and Alsever, J. B., collection and preservation of placental blood for transfusion purposes, III, 285.
- Gyárfás, K., disturbances of drawing in hypoglycemia, III, 23.
- György, P., curative factor (vitamin-H) for egg-white injury, III, 146.
- and Eckardt, R. E., vitamin-B₆ and skin lesions in rats, III, 145. Vitamin-B₆ and related factors of vitamin-B₂ complex, I and II, III, 914.
- and Goldblatt, H., hepatic injury on nutritional basis in rats, III, 220.
- Kuhn, R., and Lederer, E., curative factor (vitamin-H) for egg-white injury, III, 146.
- Melville, D. B., Burk, D., and Du Vigneaud, V., possible identity of vitamin-H with biotin and co-enzyme R, III, 516.
- Poling, C. E., and Subbarow, Y., factor curative of nutritional achromotrichia, III, 323. Experiments on antidermatitis component of filtrate factor in rats, III, 429.
- and Rose, C. S., comparative activity of vitamin-H curative of egg-white injury administered orally and parenterally to rats, III, 516.
- See also Birch, T. W., and Du Vigneaud, V.
- Gzinski, F. C., and Kilpatrick, M., kinetics of the formation of the Grignard reagent. II. Rate of reaction with ethyl bromide, I, 326.

H.

- Haack, N. H. See Bertrand, G.
- Haag, E. See Bréchet, P.
- Haag, F. E., and Latz, L., torantil (his aminase) in anaphylactic shock, III, 25.

- Haag, H. B.**, physiological activity of cigarette smoke solutions as related to nicotine content, III, 527.
and **Corbell, R. L., jun.**, age of cats and susceptibility to digitalis, III, 333.
and **Taliaferro, I.**, toxicological studies on cubé, III, 682.
- Haag, J. R.**, and **Wright, L. D.**, cystine and methionine requirements for growth and lactation, III, 142, 917. Lactation-promoting properties of proteins as measured with rats, III, 318.
- Haagen, E.** See **Brüche, E.**, and **Günther, P.**
- Haagen-Smit, A. J.**, **Wawra, C. Z.**, **Koepfli, J. B.**, **Alles, G. A.**, **Feigen, G. A.**, and **Prater, A. N.**, physiologically-active principle from *Cannabis sativa* (marihuana), III, 776.
See also **English, J., jun.**, and **Prater, A. N.**
- Haagensen, C. D.** See **Auchincloss, H.**, and **Auchincloss, R.**
- Haam, E. von**, determination of oestrogenic and gonadotropic hormones, III, 581.
and **Cappel, L.**, effect of hormones on cells grown *in vitro*. I. Effect of sex hormones on fibroblasts. II. Effect of hormones from the thyroid, pancreas, and adrenal gland, III, 854.
and **Frost, T. T.**, changes in parenchymatous organs produced by artificially induced fever, III, 255.
and **Rothermich, N. O.**, excretion of gonadotropic and oestrogenic hormones in urine during normal menstrual cycle, III, 849.
- Haarmann, W.**, **Hagemeier, A.**, and **Lendle, L.**, binding of digitalis glucosides and digitaloids to serum-proteins, III, 523.
Korfmacher, K., and **Lendle, L.**, conditions of binding of digitalis glucosides to serum-proteins, III, 523.
- Haas, A. E.**, periodic properties of isotopes, I, 337. Half-value periods of electron-emitting nuclei, I, 427.
- Haas, H. T. A.**, pharmacological control of vegetative centres, III, 601.
- Haas, O.**, and **Dougherty, G.**, formation of sulphonium compounds from benzyl iodide and organic disulphides, II, 276.
- Haas, R.**, soluble substances from bacteria of the typhoid, paratyphoid, enteritis, and Shiga group, III, 827.
- Haas, V. H.**, and **Armstrong, C.**, immunity to Lansing strain of poliomyelitis, III, 828.
- Haayman, P. W.** See **Wibaut, J. P.**
- Haban, G.** See **Vizer, T.**
- Habel, K.**, factors influencing efficacy of phenolised rabies vaccines, III, 937.
- Haber, H.**, energy exchange between translation and rotation by collision, I, 92.
- Haberlandt, H.**, detection of porphyrin and other organic substances in calcite and aragonite, I, 86.
- Hablützel, J.**, heavy Seignette salt; dielectric investigations on $\text{KNaC}_2\text{H}_2\text{O}_6 \cdot 4\text{D}_2\text{O}$ crystals, I, 97.
- Habs, H.**, cancer and heredity, III, 229. Occurrence of cancer in twins, III, 229. *Bacterium acetylcholini*. II. Place of *B. acetylcholini* in the bacterial classification, III, 354.
- Hachihama, Y.**, **Zyodai, S.**, and **Umezu, M.**, lignin and related compounds. I. Hydrogenation of soft-wood lignin, II, 352.
- Hackenberg, E. G.**, and **Ulich, H.**, anhydrous aluminium perchlorate, I, 126.
- Hackerman, N.** See **Cohan, L. H.**
- Hackl, O.**, determination of lithium in mineral waters, and new method for determination of lithium in silicate rocks, I, 174.
- Hacman, D.**, optical properties of very thin metallic films, I, 63.
- Hádáček, J.**, oils from fresh-water fish; carp and tench, III, 225. Albumins and globulins in serum, III, 286.
See also **Bureš, E.**
- Haden, R. L.**, new Sahli type haemoglobinometer, III, 184. Nature of haemolytic anaemia, III, 276. New instrument for diffractometric measurement of diameter of red blood cells, III, 375. Treatment of polycythemia vera, III, 879.
- Hadidian, Z.**, and **Hoagland, H.**, chemical pacemakers [in brain]. I. Catalytic brain-iron. II. Activation energies of chemical pacemakers, III, 112.
See also **Himwich, H. E.**
- Hadley, F. P.**, and **Hadley, P.**, peroxide production by type 3 strains of group A β -haemolytic streptococci, III, 542.
- Hadley, P.** See **Hadley, F. P.**
- Hadwen, S.**, and **Gwatkin, R.**, detection of abnormal cow's milk by microscopic methods, III, 225.
- Haefele, W. R.** See **Kharasch, M. S.**
- Häfiger, F.**, 1:2:2-trimethylcyclopentane-1:3-dialdehyde, "camphocendi-aldehyde," II, 131.
See also **Rupe, H.**
- Hägele, G.**, X-ray study of bindheimite from Waitschach, near Hüttenberg, Carinthia, I, 238.
and **Machatschki, F.**, synthesis of alumopharmacosiderite; formula and structure of pharmacosiderite, I, 422.
- Haendler, H. M.** [with **Smith, G. McPhail**], inner complexes, II, 311.
- Haertig, E. W.**, and **Masserman, J. H.**, hypothalamic lesions and pneumonia in cats, III, 799.
- Häusler, G.** See **Füchtbauer, C.**
- Haex, A. J. C.** See **Hoekstra, R. A.**
- Haffen, R.** See **Turner, C. D.**
- Hafstad, L. R.** See **Heydenburg, N. P.**
- Haft, H. H.** See **Allen, E. G.**
- Hagedoorn, A.**, deficiency diseases of ocular nerves; lesions of optic nerve and central nervous system, III, 491. Amaurotic idiocy and related conditions; pathology of retina in infantile amaurotic idiocy, III, 802.
- Hagedoorn, J. G.**, optical pyrometer for general use, I, 132.
- Hagemeier, A.**, determination of digitalis glucosides and genins with the step photometer, III, 523.
See also **Haarmann, W.**
- Hagen, C.**, charge potential, secondary emission, and fatigue phenomena of electron-irradiated metals and luminescent substances, I, 96.
- Hagen, J.**, vitamin-C treatment of chronic benzene poisoning in low-pressure workers, III, 865. Lung affections caused by mineral pigments, III, 865.
- Hagenmeyer, H. O.** See **Scheurer, O.**
- Hager, B. G.**, alimentary leucocytosis and gastric acidity, III, 133. Takata reaction and carbohydrate metabolism, III, 150. Exposure to light and excretion of coproporphyrin in urine, III, 159.
- Haggard, H. W.**, and **Greenberg, L. A.**, absorption, distribution, and elimination of alcohol. V. Influence of glycocoll [glycine] on absorption of alcohol, III, 528.
- Haggard, H. W.**, **Greenberg, L. A.**, and **Rakiety, N.**, absorption, distribution, and elimination of alcohol. VI. Principles governing concentration of alcohol in blood and concentration causing respiratory failure, III, 823.
- Greenberg, L. A.**, **Rakiety, N.**, and **Cohen, L. H.**, absorption, distribution, and elimination of alcohol. VII. Influence of inhalation of oxygen and carbon dioxide and drugs on concentration of alcohol in blood causing respiratory failure, III, 823.
- Haggard, W. D.**, and **Kirtley, J. A., jun.**, pancreatic calculi, III, 219.
- Hagger, O.**, and **Wyk, A. J. A. van der**, properties of polymerides in solution. XIV. System cellulose triacetate-tetrachloroethane, I, 293.
- Hagio, K.**, hyperplasia of blood-forming tissues. I. Acute leukaemia and chronic myelosis; erythromyelosis. II. Monocytic leukaemia. III. Chloroma, myeloid sarcoma, and multiple myeloma, III, 183, 468.
See also **Amano, S.**
- Hagiwara, T.**, liberation of neutrons in nuclear explosion of uranium irradiated by thermal neutrons, I, 142.
- Hagmann, L. E.**, injecting insect tracheae permanently, III, 786.
- Hagströmer, A.** See **Cope, O.**
- Hahn, (Miss) D. A.**, **McLean, (Miss) M. J.**, and **Endicott, (Miss) M. M.**, ring-closure of acyclic ureides resulting from elimination of alcohol; esters of β -phenylalanine-N-acetic acid and related compounds, II, 277.
- Hahn, F.**, cumulation of digitalis and glycogen content of heart, III, 523.
- Hahn, G.** See **Otto, Hans.**
- Hahn, L.**, and **Hevesy, G.**, interaction between phosphatides of the plasma and corpuscles, III, 6. Phosphatide exchange between plasma and organs, III, 56. Turnover rate of nucleic acid, III, 860.
See also **Walinski, F.**
- Hahn, O.**, peculiarities in artificially produced atom types from nuclear splitting of uranium and thorium, I, 90.
- Flügge, S.**, and **Mattauch, J.**, chemical elements and naturally occurring atoms from viewpoint of isotope and nucleus investigation, I, 185.
- and **Strassmann, F.**, disruption of the uranium and thorium nuclei into lighter atoms, I, 90. Application of the "emanation capacity" of thorium hydroxide to production of transmutation products of thorium, I, 187. Application of "emanation capacity" of uranium compounds to production of transmutation products of uranium; two short-lived alkali metals, I, 187.
See also **Aston, F. W.**
- Hahn, P. F.**, **Bale, W. F.**, **Hettig, R. A.**, **Kamen, M. D.**, and **Whipple, G. H.**, radioactive iron and its excretion in urine, bile, and faeces, III, 376.
- Bale, W. F.**, **Lawrence, E. C.**, and **Whipple, G. H.**, radioactive iron and its metabolism in anaemia, III, 90.
- Bale, W. F.**, **Ross, J. F.**, **Hettig, R. A.**, and **Whipple, G. H.**, radio-iron in plasma does not exchange with haemoglobin-iron in red cells, III, 791.

- Hahn, P. F., Ross, J. F., Bale, W. F., and Whipple, G. H., utilisation of iron and rapidity of hæmoglobin formation in anæmia due to blood loss, III, 879.
See also Miller, L. L.
- Hahn, R. G. See Horsfall, F. L., jun.
- Haig, C. See Lewis, J. M.
- Hailer, E., action of bactericidal substances on human and bovine tubercle bacilli. V. Bases, salts, esters, and other compounds, III, 170.
- Haimovici, H., and Hodes, R., preganglionic nerve regeneration in completely sympathectomised cats, III, 570.
- Haines, R. W., epiphyses in *Sphenodon* and primitive form of secondary centre, III, 85. Independence of sesamoid and epiphyseal centres of ossification, III, 873.
See also Cave, A. J. E.
- Haines, S. F. See Eaton, I. M.
- Hair, G. W., and Mezen, J. F., functional innervation of hypophysis, III, 207.
- Haist, R. E., pituitary and insulin content of pancreas, III, 901.
and Best, C. H., factors affecting insulin content of pancreas, III, 732.
See also Best, C. H., and Ham, A. W.
- Haitinger, M., and Schwertner, R., fluorescence microscopy in bacteriology, III, 773.
- Halasz, A., preparation of aliphatic aldehydes by catalytic dehydrogenation of alcohols in the liquid phase in the presence of reduced nickel, II, 118.
- Halban, H., jun., Joliot, F., Kowarski, L., and Perrin, F., evidence for a chain nuclear reaction in the middle of a uraniferous mass, I, 5.
- Halberstaedter, L., benzpyrene tumour strain in hamsters with tendency to metastasis formation, III, 44. Tumours produced in hamsters by benzpyrene, III, 505.
- Halbertsma, T. J., fenestra parietales symmetrica, III, 834.
- Halbrecht, J., fresh and stored placental blood, III, 186.
- Hald, P. M. See Heinemann, M., and Solomon, R. Z.
- Haldane, J. B. S. See Grüneberg, H.
- Haldi, J., Bachmann, G., Wynn, W., and Ensor, C., effects produced by an increase in calcium and phosphorus content of diet on calcium and phosphorus balance and on various body constituents of the rat, III, 319.
and Giddings, G., water content of organs of albino rat on high-carbohydrate and high-fat diet, III, 591.
- Hale, C. W. See McClean, D.
- Hale, D. H., Townsend ionisation coefficients for Ni and Al cathodes in an atmosphere of hydrogen, I, 88.
- Hale, R. W. See Friend, J. N.
- Hale, T. See Thompson, K. W.
- Hale, W. M. See Porter, J. R.
- Halford, J. O., hydrogen isotope exchange reaction, I, 220.
- Halford, R. S., entropy of vaporisation and restricted molecular rotation in liquids, I, 353.
- Hall, A. C., electronic relay for heat control, I, 420.
- Hall, B. E. See Watkins, C. H.
- Hall, D. A. See Friend, J. N.
- Hall, D. L. See Lennox, F. G.
- Hall, F. See Hench, P. S.
- Hall, F. G., spectroscopic method for determination of oxygen saturation in whole blood, III, 18.
- Hall, G. C. See Addlestone, J. A.
- Hall, G. E. See Goodwin, J. E., Hyland, H. H., Loughheed, D. W., McEachern, C. G., and Manning, G. W.
- Hall, G. S., tuberosc sclerosis, rheostosis, and neurofibromatosis, III, 419.
- Hall, Harry. See Kremen, A. J., and Wangenstein, O. H.
- Hall, Harvey. See Halpern, O.
- Hall, J. L. See Carter, R. O.
- Hall, K., changes in adrenals of gonadectomised male and female rats produced by prolonged injections of sex hormones, III, 734.
See also Korenchevsky, V.
- Hall, M. G., Darling, R. C., and Taylor, F. H. L., vitamin-C requirement in rheumatoid arthritis, III, 324.
- Hall, N. F., systems of acids and bases, I, 359.
and Meyer, Fred, acidity scale in glacial acetic acid. II. Buffer solutions — $1.6 < H_0 < 3.8$, I, 440.
and Spengeman, W. F., acidity scale in glacial acetic acid. I. Sulphuric acid solutions — $6 < H_0 < 0$, I, 440.
- Hall, R. P., and Loefer, J. B., effects of culture filtrates and old medium on growth of the ciliate *Colpidium campylum*, III, 538.
- Hall, R. T., Holcomb, J. H., jun., and Griffin, D. B., separation and determination of isomeric menthols, II, 242.
- Hall, S. A., and Spoerri, P. E., pyrazine series. II. Preparation and properties of aminopyrazine, II, 193.
- Hall, S. R., and Dryden, L. P., dose-response relationship of androsterone by direct application to capon's comb, III, 131.
- Hall, V. E., and Goldstone, P. B., influence of adrenaline on shivering and on metabolism in the cold, III, 439.
and Langley, L. L., influence of rate of urine formation on potassium excretion, III, 910.
See also Horsburgh, D. B.
- Hall, W. K., Fader, D. E., and Decherd, G. M., preparing dried serum-proteins for therapeutic use, III, 839.
See also Schenken, J. R.
- Halla, F., free energy of dolomite formation, I, 27. Calculation of free energies of formation from ternary equilibrium diagrams, I, 216. Synthesis of dolomite by double decomposition, I, 227.
- Hallaran, W. R. See Wright, G. W.
- Haller, H. L. See Goodhue, L. D., and Schechter, M. S.
- Hallett, L. T., and Kaipers, J. W., micro-determination of sulphate obtained from combustion of organic compounds; tetrahydroxy[benzo]quinone as an indicator, II, 318. Micro-determination of sulphur in organic compounds; absorption apparatus for use with the combustion method, II, 318.
- Halliday, H. M., and Reade, T. H., action of nitrous acid on formaldehyde, II, 118. Action of nitrous acid on *p*-nitrodimethylaniline in hydrochloric acid, II, 125.
- Halliday, N., lipin, carbohydrate, and moisture content of liver in diabetes mellitus, III, 665.
- Deuel, H. J., jun., Tragerman, L. J., and Ward, W. E., isolation of glucose-containing cerebroside from spleen in a case of Gaucher's disease, III, 315.
See also Deuel, H. J., jun.
- Hallimond, A. F. [with Harvey, C. O., and Bannister, F. A.], relation of chamosite and daphnite to the chlorite group, I, 48.
- Hallman, E. T. See Langham, R.
- Hallman, L. F. See Blunden, H., and Deuel, H. J., jun.
- Hallman, N., and Simola, P. E., mechanism of biological citric acid synthesis, III, 434.
- Hallock, P., polycythæmia of morbus cæruleus, III, 703.
See also Stenstrom, K. W.
- Hallpike, C. S., electrophysiology of hearing, III, 118. Intralabyrinthine pressure, III, 119. Histological changes in temporal bones of a case of Ménière's disease, III, 119.
See also Grüneberg, H.
- Hallum, A. V., congenital secondary glaucoma; report of 2 cases syphilitic in origin, III, 115.
- Halpenny, G. W., and MacDermot, H. E., effects of tea drinking, III, 603.
- Halperin, M. H. See McFarland, R. A.
- Halpern, B. N., toxicity and cardio-vascular action of β -phenylisopropylamine (benzedrine), III, 248.
- Halpern, J. See Cork, J. M., and Crane, H. R.
- Halpern, O., and Hall, Harvey, energy losses of fast mesotrons and electrons in condensed materials, I, 190.
and Johnson, M. H., magnetic moment of the neutron, I, 143.
- Halpert, B. See D'Aunoy, R., and Kramer, B.
- Halpin, J. G. See Baumann, C. A., and Christiansen, J. B.
- Halsted, J. A. See Gessler, C. J.
- Halverson, J. O., Hostetler, E. H., Foster, J. E., and Sherwood, F. W., soya-bean hay, lucerne hay, and yellow maize as vitamin-A supplements in cottonseed meal rations for growing cattle, III, 321.
- Ham, A. J., and Dean, E. D. M., examination of electrokinetic charge density as a function of the thickness of the double layer, I, 114.
- Ham, A. W., and Haist, R. E., histological effects of diabetogenic anterior pituitary extracts, III, 121.
- Littner, N., Drake, T. G. H., Robertson, E. C., and Tisdall, F. F., physiological hypertrophy of parathyroids, its cause and relation to rickets, III, 806.
- Ham, T. H., chronic hæmolytic anæmia with paroxysmal nocturnal hæmoglobinuria, III, 282.
and Dingle, J. H., chronic hæmolytic anæmia with paroxysmal nocturnal hæmoglobinuria: immunological aspects of the hæmolytic mechanism with special reference to serum complement, III, 94.
- Ham, W. R., diffusion of hydrogen through oxygen-free copper, I, 19.
See also Simons, J. H.
- Hamaguchi, E., iodine rashes in exophthalmic goitre, III, 527.
- Hamaker, H. C., influence of particle size on physical behaviour of colloidal systems, I, 111. Formation of a deposit by electrophoresis, I, 119.
and Verwey, E. J. W., rôle of forces between particles in electro-deposition and other phenomena, I, 115.
- Hamann, A. See Brunschwig, A.
- Hamann, E. E., and Huddleson, I. F., effect of sulphapyridine on *Brucella abortus* in vitro and in vivo, III, 330.

- Hamblen, E. C., Arena, H. M., and Cuyler, W. K., [androgen excretion in] Hand-Schüller-Christian disease, III, 917.
- and Cuyler, W. K., androgens and the "colouring" of women, III, 33.
- Cuyler, W. K., and Baptist, M., urinary androgens and uterine bleeding, III, 734.
- Cuyler, W. K., and Hirst, D. V., urinary progesterin after intramuscular progesterone, III, 737. Urinary progesterin after orally given anhydrohydroxyprogesterone, III, 737. Urinary excretion of pregnanediol complex by males. I. Following oral administration. II. Following intramuscular administration of progesterone, III, 850.
- Powell, N. B., Cuyler, W. K., and Pattee, C. J., oral use of pregnenolone in functional menometrorrhagia, III, 811.
- Ross, R. A., Cuyler, W. K., Baptist, M., and Ashley, C., metabolism of androgens in woman, III, 213.
- See also Cuyler, W. K.
- Hamblen, F. A. See Kreinin, S.
- Hambleton, A., and Christianson, R. A., choice of technique for sedimentation test, III, 184.
- Hambresin, L., and Schepens, C., three families affected with optic neuritis, III, 491.
- Hamburger, M., jun. See Gregg, L. A.
- Hamburger, W. W. See Friedman, M.
- Hamdi, T. N., and Ferguson, J. K. W., hæmolytic action of fluorides on nucleated erythrocytes, III, 838.
- Hamence, J. H., detection of molybdenum and tungsten, I, 233.
- Hamer, (Miss) F. M., bases of which methineyanines are the quaternary salts, II, 292.
- Hamer, W. J., and Acree, S. F., potentiometric method for accurate measurement of hydrogen-ion activity, I, 220.
- Burton, J. O., and Acree, S. F., second ionisation constant and related thermodynamic quantities for malonic acid from 0° to 60°, I, 294.
- Hamilton, C. M. See King, Harold.
- Hamilton, C. S. See Banks, C. K., and Clem, W. J.
- Hamilton, D. R., directional correlation of successive quanta, I, 385.
- Hamilton, J. See Smith, Charles Linton.
- Hamilton, J. B., and Golden, W. R. C., responses of female to male hormone substances, III, 216.
- See also Dorfman, R. I., and Wolfe, J. M.
- Hamilton, J. D., gelation phenomena in wheat-flour films, I, 410.
- See also Rich, A. R.
- Hamilton, J. G., and Soley, M. H., studies in iodine metabolism by use of new radioactive isotope of iodine, III, 240. Comparison of metabolism of iodine and element 85 (eka-iodine), III, 860.
- Hamilton, J. M., isobutyl methacrylate as mounting medium for histological preparations, III, 786.
- Hamilton, J. W. See Ross, E. L.
- Hamilton, P. M. See Mitchell, W. J.
- Hamilton, S. See Lee, C. E.
- Hamilton, T. R., and Neff, F. C., sulphapyridine in influenzal meningitis, III, 60.
- Hamilton, T. S., growth, activity, and composition of rats fed diets balanced and unbalanced with respect to protein, III, 48. Heat increments of diets balanced and unbalanced with respect to protein, III, 48.
- Hamilton, W. F., Pund, E. R., Slaughter, R. F., Simpson, W. A., Colson, G. M., Coleman, H. W., and Bateman, W. H., blood pressure values in street dogs, III, 385.
- See also Robinow, M., Volpitta, P. P., and Woodbury, R. A.
- Hamilton, W. J., and Gould, J. H., normal oestrous cycle of ferret: correlation of vaginal smear and histology of genital tract, with notes on distribution of glycogen, incidence of growth, and reaction to intravital staining by trypan-blue, III, 659.
- See also Amoroso, E. C.
- Hamilton-Paterson, J. L., and Johnson, E. W. M., post-mortem glycolysis [and blood-sugar], III, 629.
- Hamlin, K. E., jun., and Hartung, W. H., synthesis of hydroxymandelonitrile dibenzoates, II, 345.
- Hammar, J. A., does hyperplasia of thymus gland indicate excessive functional activity? II, 578.
- Hammarson, A. See Hedvall, J. A.
- Hammer, H. T. See Braasch, W. F.
- Hammerschmidt, J., action of prontosil, III, 436.
- Hammett, F. S., and Reimann, S. P., chemical specificity in growth and development, III, 623.
- See also Barbour, H. G.
- Hammett, L. P., determination of the proton-attracting properties of liquids, I, 403.
- See also Beste, G. W.
- Hammon, W. D., cellular blood elements of normal kittens, III, 702.
- and Enders, J. F., blood and hæmatopoietic tissues in malignant panleucopenia of cats, III, 183.
- See also Enders, J. F.
- Hammond, J. C., and Marsden, S. J., effect of level of protein intake on growth and feed utilisation of turkeys, III, 48.
- Hammond, W. S., origin of cells lining liver sinusoids in cat and rat, III, 372.
- Hamne, B. See Magnusson, J. H.
- Hamon, M., presence of α -amino-acids in spermatophores of *Taguridæ*, III, 33.
- See also Rose, M.
- Hamon, V. See Rist, N.
- Hamperl, H. See Arnold, O.
- Hampton, B. L. See Hasselstrom, T.
- Hampton, S. See Cooke, R. A.
- Hampton, S. F., and Stull, A., antigenic studies by Dale test. II. Antigenicity of house dust, III, 528.
- Hamre, C. J., capillary hematocrit method of determining blood cell volume, III, 378.
- and Wong, K. K. L., hæmatologic values for normal children, 3, 4, and 5 years of age living in Hawaii, III, 787.
- Hanafusa, S., and Kibota, K., reticulo-sarcoma of the throat, III, 913.
- Hanaoka, K., *N*-glucosides. II. *N*-Glucosides of aniline derivatives and anilides of various sugars, II, 324.
- Hanaoka, K. I., influence of follicular hormone on sex differentiation in *Hynobius retardus*, III, 653.
- Hanaui, R. See Albertson, W. E.
- Hanausek, J., transfusion of leucocytes, III, 377. Obtaining leucocytes from a small quantity of blood, III, 468.
- Hanby, W. E., and Waters, W. A., decomposition reactions of aromatic diazo-compounds. VII. Reactions of diazonium chlorides with esters and nitriles, II, 11.
- Hance, R. T., and Chermock, R. L., uses of vacuum in micrology, III, 702.
- Hancey, R. T. See O'Brien, H. C.
- Hancock, (Miss) E. M. See Cope, A. C.
- Hancox, N. C., and Jones, T. G. H., optically pure *l*- α -phellandrene, II, 136.
- Hand, D. B., mol. wt. and association of urease, III, 162.
- and Sharp, P. F., rapid photo-electric determination of carotenoid in milk fat, III, 320. Riboflavin content of cow's milk, III, 323.
- See also Randolph, L. F., and Sharp, P. F.
- Handel, J. van den. See Becquerel, J., and De Haas, W. J.
- Handelsman, M. B. See Golden, L. A.
- Handler, P. See Bernheim, F., and Carter, H. E.
- Handley, F., and Downing, J. G., nodular myxedema complicating thyrotoxicosis, III, 29.
- Handovsky, H., ascorbic acid and its production in the animal organism, III, 324. Does thymus extract affect action of pituitrin on uterus? III, 496. Correlation between movements of gravid uterus and formation of histamine, III, 661.
- Casier, H., and Delaunois, A. L., production of reducing substances, especially ascorbic acid, in pigeon and guinea-pig muscle following administration of dinitroresol and metabolites, III, 604. Sensitisation of hyperthermic effects of dinitroresol by metabolites, III, 604.
- Haneef, M. See Dhingra, D. R.
- Hanes, C. S., enzymic synthesis of starch from glucose 1-phosphate, III, 448. Breakdown and synthesis of starch by an enzyme system from pea seeds, III, 766. Reversible formation of starch from glucose 1-phosphate catalysed by potato phosphorylase, III, 826.
- Haney, H. F., Roley, W. C., and Cole, P. A., effect of bile on propulsive motility of Thiry-Vella [intestinal] loops in dogs, III, 134.
- See also Grondahl, J. W., and Youmans, W. B.
- Haney, H. H. See Cleveland, F. F.
- Hanger, F. M., and Gutman, A. B., post-arsphenamine jaundice, III, 927.
- Hanhart, E., atypical retinitis pigmentosa due to simple-recessive mutation, III, 203.
- Hanke, M. E. See Kendrick, A. B., and Necheles, H.
- Hanks, J. H., and Feldman, H. A., demonstration of tubercle bacilli in urine, III, 689. Concentration of tubercle bacilli from spinal fluid, III, 828.
- Hanle, W., inertia of the Faraday effect, I, 197.
- and Maercks, O., inertia of the Kerr effect, I, 197.
- Hanlon, C. R. See Outland, T.
- Hann, R. M. See Maelay, W. D.
- Hanna, G. D., and Grant, W. M., mounting diatoms in realgar and other substances, III, 84.
- Hannisdahl, B., changes in heart size in ski runners, III, 292.

- Hano, K., anæsthetic effect of optical isomerides, III, 251.
See also Imaizumi, R.
- Hansch, G. E., intensity of the $^3\Pi-^1\Sigma$ Cameron bands of carbon monoxide, I, 192.
- Hansen, A. E., character of phospholipin (acetone-insoluble) fatty acids of serum in infantile eczema, III, 96.
and McQuarrie, I., study of tissue-lipins in generalised lipodystrophy, III, 917.
- Palmer, L. S., and Nelson, J. W., composition of bone in osteoporosis associated with hepatoma, III, 504.
- Hansen, D. See Crandall, L. A., jun.
- Hansen, E. T., clinical studies on vitamin-K, III, 92.
See also Dam, H.
- Hansen, F., agglutination test, III, 172.
- Hansen, H. N., and Snyder, W. C., effective control of culture mites by mechanical exclusion, III, 172.
- Hansen, K. See Dybing, O.
- Hansen, K. G. See Jensen, T.
- Hansen, L., distribution of free and conjugated sulphanilamide and sulphapyridine between corpuscles and plasma in human and rabbit blood, III, 677.
- Hansen, L. A., Samuel, W. S., jun., and Forni, P. A., sorption of water vapour by vermiculite and its silica, I, 110.
- Hansen, L. I. See Lauer, W. M.
- Hansen, L. P. See Havens, W. P., and Soloway, D.
- Hansen, N. R., refractive index determinations in the infra-red for parallel-sided specimens of glass, I, 63.
- Hansen, P. A., and Nielsen, V., colorimetric determination of ammonia with thymol-hypobromite reagent, I, 38.
- Hansen, W., and Wrenshall, G. A., collisions of α -particles with chlorine nuclei, I, 278.
See also Moon, H. D.
- Hanske, W. See Steinkopf, W.
- Hansmann, G. H., and Perry, M. C., lead absorption and intoxication in man unassociated with occupations or industrial hazards, III, 824.
- Hanson, J. O., effect of carbon tetrachloride on serum-amylase of dogs, III, 96.
- Hanstein, H. B., neutron-proton interaction, I, 308.
- Hanzal, R. E. See Goldblatt, H.
- Hanzlik, H. See Tainter, M. L.
- Happ, G. P. See Sheppard, S. E., and Vanselow, W.
- Happley, F., volume integration of dosage for X- and γ -radiation, III, 684. Calculation of energy absorbed in irradiated tissue, III, 763. Construction of a continuously evacuated experimental X-ray tube with a transmission target, III, 945.
- Happold, F. C. See Baker, J. W., and Cooper, K. E.
- Haue, A., background in electron-diffraction patterns, I, 432.
- Hara, N. See Kaku, T.
- Hara, R. See Kuki, T.
- Hara, T. See Yamamoto, R.
- Harada, M., weathering of igneous rocks. VI. Weathering-complex. VII. Determination of free iron oxide, I, 333, 394.
- Harada, T., organo-metallic compounds. V. Formation of crystalline compounds of the type $R(SnMe_2)_3OR, SnMe_2X_2$ in alcoholic solution. VI. Thermal decomposition of tin triethyl hydroxide. VII. Effect of solvents on formation of $SnMe_2Cl, SnMe_2OH, H_2O$, and $SnMe_2Cl(SnMe_2OH)_2$, II, 158.
- Haraldsen, H., transitions in the troilite mixed crystal range, I, 66.
and Bakken, R., magnetic properties of uranium oxides, I, 352.
and Nygaard, E., magnetic studies in the system chromium-arsenic, I, 26.
- Harbard, E. H., and King, Alexander, chromic oxide as an adsorbent, I, 158.
- Harbeson, A. E., [anatomy of] external hydrocephalus, III, 202.
- Harbord, R. P., auto-inhalation carbon dioxide therapy, III, 887.
- Harden, W. C. See Macht, D. I.
- Hardgrove, M. See Fox, M.
- Hardie, P. W., apparatus for making sectional radiographs, III, 696.
- Hardin, R. C. See De Gowin, E. L.
- Harding, A. E. B., basal metabolic rate: measurement of carbon dioxide production, III, 326.
- Harding, C. F. See Chapple, E. D.
- Hardman, T. G., radiography of fourth ventricle, III, 891.
- Hardwick, C., prognosis in celiac disease, III, 310.
- Hardy, (Miss) E. M. See Cope, A. C.
- Hardy, J. D., radiating power of human skin to infra-red, III, 258.
and DuBois, E. F., differences between men and women in response to heat and cold, III, 929.
and Oppel, T. W., cold sensation by radiation, III, 799.
Wolff, H. G., and Goodell, H., new method for measuring pain threshold. Spatial summation of pain, III, 716.
See also Schumacher, G. A., and Wolff, H. G.
- Hardy, L. M. See Bigler, J. A.
- Hardy, W. T. See Boughton, I. B.
- Hare, K. See Hinsey, J. C.
- Hare, K. P., clinical investigations into anæmia in Assam. I.—VII, III, 838.
- Hare, R., fluctuations in titre of neutralising antibody for influenza virus in human beings, III, 543.
- Haresnape, J. N., Stevels, J. M., and Warhurst, E., rate of reaction of sodium atoms with polyhalogenated methane derivatives, I, 221.
- Hargrave, J., and Thompson, F. C., influence of size on dry matter, mineral, and nitrogen content of hyacinth bulbs, III, 361.
- Hargraves, M. M., and Doan, C. A., response of hæmatopoietic tissues to artificially induced fever, III, 283.
- Hargreaves, A. See Chao, S. H.
- Harrington, C. R., peptides and proteins. III, 140. Synthetic immunological chemistry, III, 172, 359. Chemistry of the thyroid gland, III, 207.
and Moggridge, R. C. G., biogenesis of vitamin-B₁₂, II, 260. Glutamic acid series, II, 287.
and Pitt-Rivers, R. V., synthesis of thyronine, II, 344.
- Harisaki, Y. See Sata, N.
- Harker, D. See Donnay, J. D. H., Senti, F., and Wrinch, (Miss) D.
- Harkins, W. D., and Boyd, E., states of monolayers on an aqueous subphase, I, 159.
Fonrt, L., and Fourt, P. C., immunochemistry of catalase. II. Activity in multilayers, III, 359.
See also Aston, F. W., Borst, L. B., and Nutting, G. C.
- Harland, M., early histogenesis of thymus in white rat, III, 699.
- Harley, D., oral potassium chloride therapy in asthma, hay fever, urticaria, and eczema, III, 339.
and Lynch, G. R., blood group tests in disputed paternity, III, 789.
- Harley, J. L., early growth of beech seedlings under natural and experimental conditions, III, 545. Beech mycorrhiza: re-isolation and effect of root extracts on *Mycelium radices fagi* (Chan.), III, 617.
- Harley, R. D., and Herrell, W. E., sulphanilamide and neoprontosil in treatment of trachoma, III, 861.
See also Blair, H. L.
- Harley-Mason, J., and Mann, F. G., quaterphenyl. I. Dihydroxy-derivatives, III, 371.
- Harlow, W. M., chemistry of the plant cell wall. IX., III, 83, 872.
- Harman, J. B., and Young, R. H., muscle lesions simulating visceral disease, III, 797.
- Harman, N. B., and Buxton, R., dislocation of lenses, with other congenital defects: secondary glaucoma, III, 397.
- Harms, H., intermolecular forces and viscosity of liquids, I, 18. Binocular vision, III, 491.
See also Katzenbogen, S., and Wolf, K. L.
- Harnapp, G. O., action of large doses of vitamin-D₂ in rickets, III, 236.
- Harne, O. G., Lutz, J. F., and Davis, C. L., induced reticulocytosis in rat and its relation to life duration of red blood cells, III, 468.
- Harned, B. K., and Cole, V. V., hyperfunction of anterior pituitary in a strain of rats, III, 206.
See also Cole, V. V.
- Harned, H. S., and Dreby, E. C., properties of electrolytes in mixtures of water and organic solvents. IV. Transference numbers of hydrochloric acid in water and dioxan-water mixtures from 0° to 50°, I, 27.
and Fallon, L. D., second ionisation constant of oxalic acid from 0° to 50°. I, 26.
and Robinson, R. A., temperature variation of ionisation constants of weak electrolytes, I, 412.
- Harper, S. H., active principles of leguminous fish-poison plants. IV. Isolation of malaccol from *Derris malaccensis*. V. *Derris malaccensis* and *Tephrosia toxicaria*, II, 185, 356.
- Harper, W. R., recombination of small and large ions in gases at high pressures, I, 277.
- Harpman, J. A. See Weddell, G., and Woollard, H. H.
- Harrell, G. T., and Fisher, S., blood chemical changes in Boeck's sarcoid, III, 97.
and McBryde, A., cirrhosis of liver in children, III, 743.
- Harrer, C. J., Schultz, M. O., and King, C. G., reduction of dehydroascorbic acid in stomach and small intestine, III, 235.
See also Schultz, M. O.
- Harreveld, A. van, spinal shock, III, 798, 889.
and McRary, W. L., mechanism of blood pressure response to anoxia during hypoglycæmia, III, 708.
- Harrington, C. D., and Searls, E. M., influence of physiological age of pea plants on recovery from aphid damage, III, 944.

- Harrington, C. D. See also Baxter, G. P.
Harrington, D. O. See Cordes, F. C.
- Harrington, R. A., and Nelson, H. R., electron-diffraction study of anodic films [on aluminium, tantalum, and titanium], I, 287.
- Harrington, T. See Dyson, G. M.
- Harris, A. W. See Gibson, J. G., jun.
- Harris, C. H. S., Smith, W., and Andrewes, C. H., virus in influenza, III, 543.
- Harris, E. J., decomposition of alkyl peroxides: di-[*n*-]propyl peroxide, ethyl hydrogen peroxide, and propyl hydrogen peroxide, I, 76. Thermal explosion of diethyl peroxide, I, 259.
- Harris, G. H. See Todd, D.
- Harris, H. A., growth of mandible in pig, III, 85. Anatomical and physiological basis of physical training, III, 225.
- Harris, I., Ireland, J. T., and James, G. V., protein requirement in adolescence and in middle age, III, 510.
See also Bircumshaw, L. L.
- Harris, I. W. H. See Cheesman, G. H.
- Harris, J. E. See De Gowin, E. L.
- Harris, J. O. See Cocker, W.
- Harris, J. S., and Farber, S., transposition of great cardiac vessels: phylogenetic theory of Spitzer, III, 2.
and Kohn, H. I., resistance to sulphanyl derivatives *in vitro* and *in vivo*, III, 822.
and Reiser, R., lipodystrophy; report of case with metabolic studies, III, 675.
See also Michel, H. O.
- Harris, K. L., recovering faeces at regular intervals, III, 416.
- Harris, L. E., bromide intoxication, III, 761.
- Harris, L. J., and Abbasy, M. A., dark-adaptation test for vitamin-A deficiency, III, 300.
and Raymond, W. D., assessment of level of nutrition; determination of nicotinic acid in urine, III, 145.
- Harris, L. M. See Soutag, L. W.
- Harris, M. M. See Polatin, P.
- Harris, P. N. See Chen, K. K.
- Harris, R. G., and Prout, W. A., correlation of evaluation of disinfectants by agar cup-plate method and clinical experience, III, 922.
- Harris, R. L., and Mattill, H. A., effect of hot alcohol on purified animal proteins, III, 318.
- Harris, R. S., and Mosher, L. M., comparison of nutritive value of refined coconut oil and butter fat, III, 817.
- Mosher, L. M., and Bunker, J. W. M., nutritional availability of iron in molasses, III, 12.
- Ross, B. D., and Bunker, J. W. M., histological study of hypervitaminosis-D; relative toxicity of vitamin-D from irradiated ergosterol and tuna-liver oil, III, 146.
See also Bunker, J. W. M.
- Harris, S., and Pierce, J. S., Kolbe synthesis with alkyl-o-xenols, II, 345.
- Harris, S. A., and Folkers, K., synthesis of vitamin-B₆, II, 11, 105.
See also Stillier, E. T.
- Harris, W. B. See Hatch, T.
- Harris, W. E. See Bowden, S. T.
- Harris, W. T. See Kanner, M. H.
- Harrison, A. J. See Jacobsohn, S.
- Harrison, C. V. See Grace, W. H.
- Harrison, D. C., and Mellanby, (Sir) E., ionisation of calcium phytate, III, 618.
- Harrison, F., attempt to produce sleep by diencephalic stimulation, III, 571.
- Harrison, G. A. See Chandler, F. G.
- Harrison, G. R., new methods in spectroscopy, I, 271. Testing and use of concave diffraction gratings, I, 330.
and Albertson, W. E., further description and classification of spectrum of singly-ionised cerium, I, 381.
and Bitter, F., Zeeman effects in complex spectra at fields up to 100,000 gauss, I, 88.
- Harrison, H. C., and Long, C. N. H., distribution of ketones in tissues, III, 434. Effects of anterior pituitary extracts in fasted rat, III, 730.
See also Harrison, H. E.
- Harrison, H. E., and Harrison, H. C., effect of deoxycorticosterone acetate on blood-sugar and -electrolytes of adrenalectomised rats, III, 409.
See also Darrow, D. C.
- Harrison, K. S., clinical application of thyrotropic hormone, III, 731.
- Harrison, R. J., phosphorus and iron in *Sagitta setosa* and *S. elegans*, III, 315.
- Harrison, R. W. See Miller, B. F.
- Harrison, S. P. See McEwen, E. G.
- Harrison, T. R. See Grollman, A., and Williams, J. R., jun.
- Harrold, G. C., and Gordon, L. E., use of interferometer for two-component mixtures, I, 133.
- Harrow, B. See Wagreich, H.
- Harsh, G. F., and Donovan, P. B., potassium chloride in allergic disorders, III, 871.
- Harsh, R., Overholser, M. D., and Wells, L. J., effect of oestrogen and androgen injections on reproductive organs in male rats and mice, III, 582.
- Hart, D., and Meyrowitz, R., systematic detection of thiocyanate, iodide, bromide, and chloride, I, 370.
- Hart, E. B., Bohstedt, G., Deobald, H. J., and Wegner, M. I., utilisation of simple nitrogenous compounds such as urea and ammonium bicarbonate by growing calves, III, 318.
See also Frost, D. V., Hove, E., Oleson, J. J., and Schantz, E. J.
- Hart, E. P. See Christiansen, J. B.
- Hart, E. W. See Bushby, S. R. M.
- Hart, G. H., vitamin-A deficiency and requirements of farm mammals, III, 914.
See also Guilbert, H. R.
- Hart, J. F., and Lisa, J. R., rate of occurrence of hypoglycaemia, III, 707.
- Hart, J. P. See Crews, L. T.
- Hart, P. J., determination of elastic constants by piezo-electric methods, I, 152.
- Harte, R. A. See Landsteiner, K.
- Harteck, P. See Groth, W.
- Harten, M., and Walzer, M., serum allergy, III, 339.
See also Gray, I.
- Hartenstein, H. J., prophylaxis of rickets with vitamin-D₂ and -D₃, III, 858.
- Hartgraves, T. A. See Williams, H. G.
- Hartley, F., and Linnell, W. H., structure of γ -sugars. II. Stability of γ -fructose and heat of activation of its conversion into normal fructose. III. Preparation of 3:4:6-trimethylfructose. IV. Preparation of 6-methylfructose, II, 119, 323.
- Hartley, G. A. R., Henry, T. H., and Whytlaw-Gray, R., adsorption error in the determination of gaseous densities and the adsorption of gases on vitreous silica, I, 68.
- Hartley, G. S., hydrolysis or alcoholysis of resorcinol ether sulphonic acids, II, 42.
Sulphonates of higher alkyl phenolic ethers, II, 42.
and Roe, J. W., ionic concentrations at interfaces, I, 110.
- Hartline, H. K., nerve messages in the fibres of the visual pathway, III, 803.
See also Lucké, B.
- Hartman, C. D. See Wooldridge, D. E.
- Hartman, C. G., non-effect of ovariectomy during pregnancy in rhesus monkey, III, 127. Reproduction in the monkey as bearing on gynaecology and anthropology, III, 211. Effect of testosterone on monkey uterus, and administration of steroidal hormones as Deanesly-Parkes pellets, III, 644.
See also Marker, R. E.
- Hartman, C. R. See Abernethy, T. J.
- Hartman, E., Foote, M. W., and Pierce, H. B., blood chemistry in trichinosis of dogs, III, 629.
- Hartman, F. A., Brownell, K. A., Walther, R., and Edelmann, A., glycotropic (anti-insulin) activity of sodium factor and cortin fractions of adrenal, III, 897.
and Dubach, R., effect of adrenal preparations on adrenalectomised nephrectomised rat, III, 895.
- Lewis, L. A., and Gabriel, J. E., refractory state following repeated injections of adrenal extract, III, 727.
- Lewis, L. A., Gabriel, J. E., Spoor, H. J., and Brownell, K. A., effect of cortin and sodium factor on adrenalectomised animals, III, 846.
and Spoor, H. J., cortin and sodium factor of adrenal, III, 727.
- Hartman, R. J., and Gassmann, A. G., kinetics of esterification of substituted benzoic acids, I, 365.
- Kanning, E. W., and Weber, J. E., agaric acid and the Donnan theory of membrane equilibrium, I, 320.
- Hartman, T. L., use of Sudan-black B as a bacterial fat stain, III, 374.
- Hartmann, A. F., clinical studies in acidosis and alkalosis; use and abuse of alkali in bicarbonate deficiency due to renal acidosis and sulphanilamide alkalosis, III, 380.
- Hartmann, G. K., and Focke, A. B., absorption of supersonic waves in water and in aqueous suspensions, I, 153.
- Hartmann, M., Kuhn, R., Schartau, O., and Wallenfels, K., metabolic effect of gyno- and andro-gamones during fertilisation of sea-urchin eggs, III, 736.
and Schlittler, E., African arrow poison plants. I. *Adenium somalense*, Balf. fil., II, 206.
- Hartmann, O., blood group A2B with well developed agglutinin 1 and its relation to blood transfusion, III, 379.
- Hartree, E. F. See Keilin, D.
- Hartshorn, L., Megson, N. J. L., and Rushton, E., molecular relaxation and elastic and dielectric properties of plastics, I, 433.
and Rushton, E., condenser for testing of liquid dielectrics, I, 83.
- Hartshorne, N. H. See Elias, P. G.
- Hartung, E. J. See McMahon, B. C.
- Hartung, W. H. See Cope, A. C., Crossley, F. S., Hamlin, K. E., jun., and Sumerford, W. T.
- Hartwell, J. L., preparation of triocetoin, II, 363.

- Hartzell, A. See Weedon, F. R.
- Harvey, A. M., action of quinine methochloride on [ganglionic and] neuromuscular transmission, III, 483. Relation between drug action and calcium-potassium ratio in striated muscle, III, 526.
- and Macintosh, F. C., calcium and synaptic transmission in sympathetic ganglion, III, 298.
- See also Brown, G. L.
- Harvey, C. O. See Hallimond, A. F.
- Harvey, E. M. See Rygg, G. L.
- Harvey, E. N. See Chance, B., and Davis, H.
- Harvey, G. G., X-ray diffraction in liquid ethyl alcohol, I, 13.
- See also Jauncey, G. E. M.
- Harvey, H. W., nitrogen and phosphorus required for growth of phytoplankton, III, 351.
- Harvey, R. A. See Ide, A. G., and Murlin, J. R.
- Harvill, T. H. See Pollard, H. M.
- Hasama, B., function of sweat centre as expressed in electrogram of sweat glands, III, 480.
- Hasbrouck, R. B. See Snyder, H. R.
- Hasegawa, M. See Hattori, S., and Noda, T.
- Haseltine, W. R., mutual interaction of plasma electrons, I, 306.
- See also Varney, R. N.
- Haselwood, L. A. See Kuntz, A.
- Hashiguchi, N., precursor of adrenalin, III, 896.
- Hashimoto, E. I. See Freudenberg, C. B.
- Hashinger, E. H. See Kyger, E. R., jun.
- Haskellberg, L. See Adler, S.
- Haskell, C. C., influence of anaesthetic on results of digitalis assay by the cat method of Hatcher and Brody, III, 601.
- Haskins, A. L., jun., assay of progesterone by intrauterine application in rabbit, III, 651.
- Haskins, C. P. See Buchwald, C. E., and Whelden, R. M.
- Hasler, A. D., Meyer, R. K., and Field, H. M., premature spawning induced in trout by pituitary glands of carp, III, 214.
- Hass, G., and Schulz, R. Z., methods of isolating amyloid from other tissue elements, III, 814.
- Hass, H. B. See Seigle, L. W., and Vanderbilt, B. M.
- Hassan, A., and Mohammed, A. H., atropine and ergotoxine versus scorpion toxin, III, 864.
- Hassel, O. See Finback, C., and Frivold, O. E.
- Hasselmann-Kahlert, M., disturbances of menstruation of white women in tropical climate, III, 660.
- Hasselstrom, T., and Hampton, B. L., ω -camphor series. I. Synthesis of 2-keto-apocamphane-1-acetic acid, II, 97.
- Hassid, W. Z., isolation of a hexose monophosphate from pea leaves, III, 944.
- and Barker, H. A., structure of the dextran synthesised from sucrose by *Betacoccus arabinosaceus*, Orla-Jensen, II, 268.
- McCready, R. M., and Rosenfels, R. S., determination of starch in plants, III, 461.
- See also Ruben, S.
- Hastings, A. B., and Eisele, C. W., diurnal variations in acid-base balance, III, 560.
- Hastings, A. B. See also Danielson, I. S., Drinker, N., Kiese, M., Taylor, J. F., and Van Slyke, D. D.
- Hastings, A. E., secondary emission from films of silver on platinum, I, 276.
- Hastings, D. W. See Appel, K. E.
- Hastings, E. G., and Peterson, E. H., deterioration of the bovine udder in absence of streptococci, III, 911.
- Hastings, (Miss) J. L. See Schumb, W. C.
- Hata, S., alteration of allanite, I, 46.
- Hatakeyama, Y. See Takenaka, S.
- Hatano, S., nephrosis with deposition of calcium salts in hypochloræmia, III, 312.
- Hatch, G. T. See Allison, S. K.
- Hatch, T., and Harris, W. B., requirements for dust control in stone cutting, III, 341.
- and Northrup, R. B., exhaust booth designed to insure health and safety in spray painting, III, 257.
- Hatcher, J. B. See Borsook, H.
- Haterius, H. O., pituitary involvement in control of water diuresis, III, 577.
- and Fugo, N. W., relaxation of pelvic ligaments of guinea-pig induced by progesterone, III, 215.
- and Kempner, M. J., uterine distension and maintenance of pregnancy following oophorectomy in rat, III, 213.
- Hathaway, H. R. See SeEVERS, M. H.
- Hathaway, I. L. See Reece, R. P.
- Hattori, J., fission of cholesterol oxide, II, 84.
- Isomerides of 3:5:6-trihydroxy-cholanic acid, II, 88.
- Hattori, S., demethylation of wogonin, II, 102.
- and Hasegawa, M., lespedin, a dirhamnoside of campherol, II, 155.
- Hattori, Y., trimethylamine oxide in different varieties of flesh and fish. IV. Mode of formation of formaldehyde from trimethylamine oxide, II, 207.
- Hau, A. K., fate of albumin in the body, III, 519.
- Haubrich, R. See Ebbecke, U.
- Hauck, H. M. See Belser, W. B.
- Hauffe, K., and Wagner, C., thermodynamic analysis of liquidus curves of intermetallic compounds, I, 317.
- Haughton, J. L., alloys of magnesium. IX. Constitution of magnesium-rich alloys of magnesium, aluminium, and silver, I, 20.
- Haul, R., and Schoon, T., structure of ferromagnetic ferric oxide, γ -Fe₂O₃, I, 13.
- Elementary regions of ferromagnetism, I, 13.
- See also Schoon, T.
- Haultain, W. F. F. See Macpherson, A. I. S.
- Haupt, R. F., and Teller, E., specific heat and double minimum problem of ammonia, I, 16.
- Haury, V. G., and Cantarow, A., effect of magnesium sulphate on serum and peritoneal fluid-calcium, -magnesium, and -inorganic phosphorus, III, 560.
- and Drake, M. E., effect of intravenous injections of sodium diphenylhydantoinate (dilantin) on respiration, blood pressure, and the vagus nerve, III, 332.
- See also Cantarow, A., Drake, M. E., and Gruber, C. M.
- Hausberger, F. X., and Nenenschwander-Lemmer, N., relation of glycerophosphatase to carbohydrate-fat synthesis in fatty tissue, III, 150.
- Serum-vitamin-C and fever, III, 234.
- Hauschild, F., conversion of methæmoglobin into hæmoglobin by methylene-blue and thionin, III, 629.
- Hauschild, K. See Lüttringhaus, A.
- Hauser, C. R., elimination and metathetical reactions and electronic theory of rearrangements, II, 201.
- and Abramovitch, B., condensations brought about by bases. X. Michael type of condensation with esters and α -unsaturated keto-compounds, II, 308.
- and Breslow, D. S., condensations brought about by bases. IX. Relationship between the Claisen and Perkin types of condensations, II, 171.
- and Hudson, B. E., jun., condensations brought about by bases. VIII. Conversion of ethyl α -benzoylisobutyrate into ethyl benzoate and isobutyrylisobutyrate in presence of sodium ethoxide and triphenylmethane: reversibility of the Claisen type of condensation, II, 91.
- See also Breslow, D. S., Hudson, B. E., jun., Peck, R. L., and Vermillion, G.
- Hauser, E. A., and Hirshon, S., behaviour of colloidal suspensions with electrolytes, I, 25.
- and Le Beau, D. S., gelation and film formation. II. Clay films, I, 24.
- and Leggett, M. B., colour reactions between clays and amines, I, 397.
- and Reynolds, H. H., alteration of glasses to montmorillonite, I, 84.
- and Schachman, H. K., particle size determination of colloidal systems by the supercentrifuge, I, 320.
- Hauseus, M. See Govaert, F.
- Hauss, W. H., and Shen, T. C. R., influence of ephedrine and ephetonine on action of adrenaline and carotid sinus, III, 100.
- See also Marri, R.
- Havas, L., growth of induced plant tumours, III, 46.
- Influence of colchicine on sexually induced colour change of *Rhoeus amarus*, III, 130.
- Havas, P., slowing up of heavy ions in matter: application to uranium fission, I, 336.
- Haven, F. L. See Stoneburg, C. A.
- Haven, H., scalenus anticus syndrome, III, 177.
- Havens, R. See Rollefson, R.
- Havens, W. P., intestinal obstruction due to colloidal aluminium hydroxide, III, 134.
- and Caspar, S., Roentgen ray therapy in pneumococcus type I infection in rabbits, III, 258.
- Hansen, L. P., and Kramer, C. G., effect of sulphapyridine in pneumococcus type I infections in rabbits, III, 330.
- Haver, F. E., jun., and Compton, J., determination of glucose and fructose in presence of pentoses, III, 370.
- See also Compton, J.
- Haviland, J. W., and Blake, F. G., parenteral administration of sulphapyridine, III, 437.
- See also Long, P. H.
- Havinga, E. See Kögler, F.
- Haward, R. N., growth of crystals from a stream of vapour, I, 77.
- Hawes, R. C. See Alles, G. A., and Piness, G.
- Hawking, F., concentration of Bayer 205 (germanin) in human blood and cerebrospinal fluid after treatment, III, 921.
- Hawkins, E. G. E., Jones, J. K. N., and Young, G. T., constitution of banana starch, II, 207.

- Hawkins, J. W., and Gordon, J. E., [prevention of mottled enamel of teeth; rôle of fluoride], III, 464.
- Hawkins, S. J., and Coutts, E. N., artificial pneumothorax, III, 194.
- Hawkins, W. B., and Johnson, A. C., bile pigment and hæmoglobin interrelation in anæmic dogs, III, 90.
See also Messinger, W. J., and Metcalf, R. G.
- Hawkins, W. L. See Brickman, L., Dorland, R. M., and Fisher, J. H.
- Hawks, J. E., Voorhees, J. M., Bray, M. M., and Dye, M., influence of nitrogen content of diet on calorie balances of pre-school children, III, 510.
- Hawksley, J. C., occurrence of pieces of sloughed gastric mucous membrane in aspirated gastric juice, III, 35.
- Hawley, H., cleaning Jena glass filters, I, 177.
- Haworth, F. E., apparatus for determining orientation of crystals by X-rays, I, 234.
- Haworth, J. W., Heilbron, I. M., and Hey, D. H., arylpyridines. I. Phenylpyridines and nitrophenylpyridines. III. Anisyl- and nitroanisyl-pyridines. IV. Action of nitrosoacetylaminates on pyridine, II, 188.
and Hey, D. H. [with Butterworth, E. C.], nitrosoacetylaminates. II. Action of nitrous fumes on acetylaminates, II, 162.
See also Elks, J.
- Haworth, L. J. See Manley, J. H.
- Haworth, R. D., and Slinger, F. H., constituents of natural phenolic resins. XVII. Synthesis of 1-matairesinol. XVIII. 1:2:3:4-Tetrahydronaphthalene-2:3-dicarboxylic acid and the 1-phenyl derivative, II, 345, 346.
- Haworth, W. N., Hirst, E. L., Isherwood, F., and Jones, J. K. N., 2:3:4-trimethylmannose, II, 36.
- Hirst, E. L., Owen, L. N., Peat, S., and Averill, F. J., polysaccharides. XXXIII. Methylation of cellulose in air and in nitrogen, II, 36.
- Hirst, E. L., and Smith, Fred, polysaccharides. XXXVIII. Constitution of glycogen from fish liver and fish muscle, II, 36.
- Jackson, J., and Smith, Fred, properties of 3:6-anhydrogalactose, II, 244.
- Montana, R. E., and Peat, S., polysaccharides. XXXIV. Methylation of cellulose in an inert atmosphere, II, 36.
- Peat, S., and Wilson, W. J., polysaccharides. XXXVI. Hydrocellulose, II, 37.
See also Carrington, H. C., and Goodman, G. L.
- Hawver, K. See Cohen, M. B.
- Haxby, R. O., Shoupp, W. E., Stephens, W. E., and Wells, W. H., photo-fission of uranium and thorium, I, 341.
- Hazel, O., and Stuhlinger, E., energy distribution and excitation function of neutrons from transformation of lithium with α -rays, I, 52.
- Hay, R. H., nuclear magnetic moment of ^{13}C , I, 382.
- Hayashi, H. See Nikuni, Z.
- Hayashi, Kaneo. See Oshima, Yasuyoshi.
- Hayashi, Kôzô, anthocyanins. IV. Isolation of pæonin from the flowers of *Pæonia albiflora*, var. *hortensis*. V. Dye of the berries of *Fatsia japonica*, III, 175.
- Hayashi, T., biochemistry of "Bakana" fungus of rice. V. Effect of gibberellin on growth, fermentation, and size of cells, III, 767.
- Hayasi. See under Hayashi.
- Hayden, H. S. See Reynolds, L.
- Hayes, F. R., and Hollett, A., carbohydrate metabolism of developing salmon eggs, III, 433.
- Hayes, H. T., and Hunter, L., associating effect of the hydrogen atom. VI. Acid hydrazides, II, 165.
- Hayes, J. R., and Chandless, G. C., determination of bismuth by quinaldine salt of iodobismuthous acid, I, 39.
- Hayford, W. H., jun., structure of cellulose, II, 299.
- Hayman, D. F., modified Beilstein test for halogens in organic compounds, II, 112.
- Hayman, J. M., jun., current conceptions of physiology of kidney, III, 502.
See also Price, J. W.
- Hayman, M. See Katzenbogen, S.
- Haynes, E. G. See Morgan, A. F.
- Hays, H. W. See Collings, W. D., and Drill, V. A.
- Hayward, G. W., and Duncan, G. G., effect of alterations in metabolic rate on action of insulin, III, 305.
- Hayward, S. J. See Loeb, L.
- Hazard, R., Cheymol, J., and Quinquaud, A., persistence of toxic apnoea following removal of stellate ganglia, III, 194.
Persistence of toxic apnoea in spite of antipyretic injections, III, 194.
Loss of pyretic action of dinitro- α -naphthol on sulphonation, III, 762.
- Hazay, C. E. See Rein, C. R.
- Hazel, F., silicic acid as a protective colloid for manganese dioxide sols, I, 254.
- Hazel, W. M., and O'Leary, W. J., high-temperature resistance type electric laboratory furnaces, I, 234.
- Hazlehurst, T. H., and Neville, H. A., cybotaxis at interfaces, I, 319.
- Hazlet, S. E., bromination of 2-naphthyl benzoate, II, 345.
and Kornberg, H. A., bromination of *p*-diphenylacetic acid, II, 12.
- Hazleton, L. W., Koppányi, T., and Linegar, C. R., barbiturates. XXIV. Pharmacology of sec-amylyl- β -bromoallylbarbituric acid, III, 440.
See also Dille, J. M.
- Hazra, G. D. See Guha, P. C.
- Heacock, J. See Rathmell, T. K.
- Head, J. J., and Thomas, R. M., spreading effect of testis extract on areas of acute inflammation produced by physical agents, III, 473.
- Heaps, C. W., optical and magnetic properties of a magnetite suspension, I, 254.
- Heard, L. See Oblad, A. G.
- Heard, R. D. H., and Hoffman, M. M., isolation of $\Delta^4,^{17,20}$ -œstratrien-3-ol-17-one from urine of pregnant mares, III, 903.
and McKay, A. F., steroids. II. Isolation of a new androstan-3(β)-ol-2-one and of allopregnan-3(β)-ol-20-one from the urine of pregnant mares, II, 16.
See also Edson, M.
- Hearne, G. See Burgin, J.
- Hearne, T. M. See Barton, F. E.
- Heath, C. W., anæmia due to iron deficiency, III, 276.
- Heath, H. R. See Bastick, R. E.
- Heath, P., and Sachs, E., antagonism between adrenergic drugs and atropine in isolated iris dilator, III, 802.
- Heathcote, R. St. A., pharmacological actions of [phenyl- and pyridyl-]glyoxalines, III, 440.
- Heatley, A. H., velocity distribution of gaseous molecules; table for obtaining values of the error function complement, I, 289.
- Heatley, N. G., micro-respirometer, III, 832.
See also Berenblum, I.
- Hebb, C. O. See Bakkin, B. P.
- Hebb, M. H., and Nelson, E., internal conversion of γ -radiation in *L* shell, I, 427.
- Heberer, G., mandible of child from Ziegenrück, Thuringia, III, 465.
- Hecht, B. P., and Parks, L. M., cantharides. I. Titration of cantharidin. II. Assay of cantharides, III, 242, 603.
- Hecht, M. See Piccoli, L. J.
- Hecht, R., Rappaport, B. Z., and Bloch, L., contact dermatitis from cosin, III, 339.
- Hecht, S., and Pirenne, M. H., sensibility of nocturnal long-eared owl in spectrum, III, 723.
- Hechter, O., Fraenkel, M., Lev, M., and Soskin, S., influence of uterus on corpus luteum, III, 650.
Lev, M., and Soskin, S., relation of hyperæmia to action of œstrin, III, 654.
Levine, R., and Soskin, S., possible physiological significance of zinc content of insulin, III, 644.
See also Freed, S. C., and Soskin, S.
- Heck, F. J. See Baggenstoss, A. H.
- Heckel, N. J., and Hori, C. G., effect of sulphanilamide on spermatogenesis in man, III, 246.
See also Thompson, W. O.
- Hector, L. G. See Holl, F. J.
- Hedenius, P., effect of large doses of heparin on red blood cells in rats and rabbits, III, 376.
- Hediger, E. M., Chenoweth, M. B., and Gold, H., bulk ether in surgical anaesthesia, III, 760.
- Hedley, O. F., trends, geographical and racial distribution of mortality from heart disease among persons 5—24 years of age in United States during 1922—1936, III, 291.
Five years' experience (1933—1937) with mortality from acute coronary occlusion in Philadelphia, III, 383.
- Hedlund, I., α - and β -phenylthioethanesulphonic acid and the corresponding sulphones, II, 211.
See also Ramberg, L.
- Hédou, L., and Loubatières, A., irreversible nervous manifestations in depancreatised dog treated with insulin-zinc-protamine; augmentation of convulsions by intravenous glucose in spite of their hypoglycæmic origin, III, 413.
- Hedvall, J. A., lattice irregularities and their physico-chemical effects, I, 287.
[with Boström, N., Colliander, B., and Hammarson, Å.], velocity of solution of antimony, silver, and cadmium in the region of their "transition points," I, 223.
and Olsson, K., effect of transition processes and of aggressive gases on reactivity of silica, I, 228.
- Wallgren, P., and Månsson, S., increasing chemical activity of cadmium iodide by irradiation, I, 312.
New type of structure-sensitive photochemical phenomenon in crystals, I, 327.
- Hée, (Mme.) A. See Rothé, E.
- Heegaard, E. See Buchman, E. R.

- Heerd, P. F. van, respiratory regulation in *Eriocheir sinensis*, Milne-Edwards, III, 477.
- Heertjes, P. M., and Waterman, H. I., absorption spectra. III. Spectra of anthracene, octahydroanthracene, and perhydroanthracene in the ultra-violet, I, 243.
- Hegedüs, M., and Juvancz, L., determination of micro-quantities of potassium and sodium in blood serum, III, 780.
- Hegemann, G., changes in the heart and blood vessels of the lungs in experimental silicosis and silico-tuberculosis, III, 67.
- Heger, H., regeneration of tail of young trouts, III, 553.
- Hegre, E. J. See Evans, L. T.
- Hehre, E. J. See Neill, J. M.
- Heiberg, B., positive Friedman reaction in case of corpus luteum cyst, III, 905.
- Heicken, K. See Lockemann, G.
- Heide, A. M. See Neter, E.
- Heidelberger, M., Treffers, H. P., and Mayer, M., ovalbumin-antibody reaction in antisera from rabbit and horse, III, 456.
- See also Alexander, H. E., and MacPherson, C. F. C.
- Heidt, L. J., quantum yields and kinetics of a photo-sensitised production of reducing sugars from sucrose in aqueous solutions of uranyl sulphate by visible and ultra-violet light, I, 34. Apparatus for isolating monochromatic light of high intensity at 254 mμ., I, 82. Rates of the thermal reduction of dichromic acid by quinine, hydroquinone, and cinchonine in dilute sulphuric acid at 0° to 60°, I, 121.
- and Purves, C. B., inversion of sucrose, I, 326.
- Heiks, R. See Garrett, A. B.
- Heil, G. P. See Kemmerer, K. S.
- Heilbron, I. M., Hey, D. H., and Lambert, A., arylpyridines. IV. 3- and 4-Pyridyldiphenyls, II, 356.
- See also Barnett, (Miss) J., Butterworth, E. C., Carter, P. W., Cross, L. C., France, H., and Haworth, J. W.
- Heilmann, F. R., chemotherapy in experimental infections caused by *Streptobacillus moniliformis*, III, 757.
- Heilmann, P., and Wappler, R., lympho-epithelial tumours of neck, III, 913.
- Heilmeyer, L. See Brugsch, T.
- Heim, J. W., toxicity of carbon monoxide at high altitudes, III, 635.
- See also Armstrong, H. G.
- Heiman, J., growth of transplanted mammary fibro-adenoma in castrated rats injected with hormones, III, 815. Influence of androgenic hormones on transplanted tumours in white rats, III, 816.
- Heiman, M., significance of Babinski sign during hypoglycaemic treatment of schizophrenia, III, 486.
- Heimbrecht, M., and Biltz, W., existence of a higher iron phosphide, I, 37.
- and Biltz, W. [with Meisel, K.], reaction $\text{Co}_2\text{S}_3 \rightleftharpoons 2\text{CoS} + \text{CoS}_2$, I, 37.
- See also Söfge, K. H., and Zumbusch, M.
- Hein, F., and Nebe, E., organic compounds of tungsten, II, 317.
- Heinbecker, P., and Bartley, S. H., action of ether and nembutal on nervous system, III, 718.
- See also White, H. L.
- Heinemann, M., and Hald, P. M., factors that influence passage of ascorbic acid from serum to cells in human blood, III, 561.
- Heinle, R. W. See Miller, F. R.
- Heinonen, O., squint in twins, III, 204.
- Heinrich, A., differential diagnosis of acute cardiac infarction, III, 383. Treatment of poisoning with hypnotic drugs, III, 526.
- Heinrich, G., and Klemenc, A., free diffusion of discharged ions in electrode processes. I. Formation of hydrogen peroxide and oxygen at the anode, I, 33.
- Heinrich, H. See Ryan, (Miss) M. A.
- Heinrich, P. See Chardonens, L.
- Heinsen, H. A., formation of ketones from amino-acids in the kidney, III, 434.
- Heinsius, E., action of vitamin-A lack on eye, III, 202.
- Heirman, P., physiological and biochemical properties of the juice of *Psalliota campestris* (mushroom), III, 332.
- Adrenoxine. III. Effect on arterial pressure of mammals; physical and chemical properties, III, 729.
- and Goffart, M., mydriatic action of adrenoxine, III, 489.
- See also Bacq, Z. M.
- Heiser, F., measurement of p_H in human organs after death, III, 419.
- Heishman, J. O. See Miller, W. T.
- Heisig, G. B., action of radon on polymethylenes; cyclobutane and cyclobutene, I, 124.
- Heite, H. J., and Lerche, E., hydrostatic action of baths on circulation, III, 15.
- Heitler, H. See Heitler, W.
- Heitler, W., scattering of mesons and magnetic moments of proton and neutron, I, 91.
- Powell, C. F., and Heitler, H., absorption of heavy cosmic-ray particles, I, 341.
- See also Fröhlich, H.
- Heitman, H., jun. See Jukes, T. H.
- Heitz, P. See Fromageot, C.
- Heiwinkel, H., action of nuclease on cozymase, III, 448.
- Hektoen, L., and Welker, W. H., immunological differences in Bence-Jones proteins, III, 545.
- Held, E., anatomy and pathology of female genital tract, III, 125.
- Held, E. F. M. van der, and Reindl, H. P., reaction velocity of hydrogen and oxygen at surface of platinum catalyst, I, 32.
- Helferich, B., Günther, E., and Pigman, W. W., emulsion. XLII. Fission of *D*-xylosides, *L*-xylosides, and *DL*-xylosides by sweet almond emulsin, II, 67.
- and Lutzmann, H., emulsin. XL. Glucosides of isethionic acid and its ethyl ester, II, 36.
- Pigman, W. W., and Isbell, H. S., emulsin. XXXIX. Fission of methylglucosides of synthetic sugars by sweet almond emulsin. XLI. Fission of lactobionic acid by sweet almond emulsin, III, 535.
- Helff, O. M., amphibian metamorphosis. XVI. Development of forelimb opercular perforations, III, 278.
- Hellebrandt, F. A., Crigler, E. F., and Kelso, L. E. A., variations in intramuscular pressure during postural and phasic contraction of human muscle, III, 107.
- Rork, R., and Brogdon, E., effect of gelatin on power of women to perform maximal anaerobic work, III, 762.
- Heller, C. G., effect of liver and uterus on œstrone, œstradiol, and œstriol, III, 652.
- Heller, G., *cis*-indigotin. II, II, 109.
- See also Daly, S.
- Heller, H., apparatus to determine sp. gr. of small amounts of fluid, III, 618. Pituitary antidiuretic principle and anaesthesia, III, 901.
- Heller, J., excretion of emerging butterfly, III, 44.
- Heller, V. G., and Penquite, R., factors producing and preventing perosis in chickens, III, 325.
- and Wall, R., indigestible carbohydrates of feeding stuffs, III, 511.
- Hellerman, L. See Richards, M. M.
- Hellinga, J. J. A., effect of substances produced by fungi in respiration of tissue of potato tubers. I. and II., III, 538.
- Hellman, L. M. See Shettles, L. B.
- Hellman, M. See Gregory, W. K.
- Hellmann, R., lumbar pantocain anaesthesia in gynaecology, III, 252.
- Hellström, H. See Euler, H. von.
- Hellund, E. J., generalised theory of diffusion. I. and II., I, 203. Isotope separation by transient pressure diffusion, I, 277. Osmotic diffusion in gases, I, 290. Transport cross-section of helium, I, 385.
- and Uehling, E. A., transport phenomena in mixtures of gases, I, 18.
- Hellwig, C. A., histology of the thyroid in exophthalmic goitre and hyperthyroidism, III, 303. Experimental goitre due to calcium, III, 725. Routine micro-filming of tumour slides, III, 855.
- Helme, T. See Granit, R.
- Helmer, D. E., Kerr, D. E., Dolman, C. E., and Ranta, L. E., two phase-susceptible types of *B. typhosus* isolated from typhoid fever case, III, 937.
- Helmer, O. M. See Fouts, P. J., Kohlstaedt, K. G., and Page, I. H.
- Helmholz, A. C. See Alvarez, L. W.
- Helmholz, H. F., bactericidal effect of sulphathiazole and sulphamethylthiazole on bacteria found in urinary infections, III, 861. Comparison of organic acids and sulphanilamide as urinary antiseptics, III, 919.
- and Bollman, J. L., diuretic action of sucrose and other solutions, III, 851. Intravenous administration of sucrose solutions as means of producing intense diuresis, III, 910.
- Helmholz, L., and Rogers, M. T., crystal structure of potassium fluoriodate, KIO_2F_2 , I, 349.
- See also Rogers, M. T.
- Helmrich, N. L. See Clow, A.
- Helwig, E. B., islands of Langerhans in infants born of diabetic mothers, III, 499.
- Hemingway, A., Rasmussen, T., Wikoff, H., and Rasmussen, A. T., effects of heating hypothalamus of dogs by diathermy, III, 799. Effect of cutting pituitary stalk on physiological temperature regulation, III, 847.
- and Shelley, W. B., inexpensive stirrer for large water-baths, I, 377.
- See also Shelley, W. B., and Wood, H. G.
- Hemmeler, A., and Storti, F. N., detection of alkali and alkaline-earth metals, I, 130.
- Hemmeler, G., serum-iron and liver, III, 791.
- Hemming, (Miss) M. L. See Baker, J. W.
- Hems, B. A., and Todd, A. R., synthesis of bacceol, II, 348.

- Hench, P. S., Baner, W., Dawson, M. H., Hall, F., Holbrook, W. P., Key, J. A., and McEwen, C., rheumatism and arthritis. I and II, III, 667, 745.
- Henderson, E. P. See Ksanda, C. J.
- Henderson, E. W., influence of rations on annual mean egg weight of pullets, III, 318.
- Henderson, G. H., quantitative study of pleochroic haloes. V. Genesis of haloes, I, 182.
- and Sparks, F. W., quantitative study of pleochroic haloes. IV. New types of haloes, I, 182.
- Henderson, J. E., and Rubens, S. M., probe investigation of anode spots, I, 382.
- See also Barkas, W. H., Fleming, G., and Rubens, S. M.
- Henderson, S. T., band spectra of cathodoluminescence, I, 147.
- Henderson, V. E., anaesthetic characteristics of methylacetylene, III, 680.
- Henderson, W. J., King, L. D. P., Risser, J. R., Yearian, H. J., and Howe, J. D., Perdue cyclotron, I, 41.
- See also Bethe, H. A., and King, L. D. P.
- Henderson, Y., last thousand feet on Everest, III, 18.
- and Turner, J. M., carbon monoxide as hazard of polar exploration, III, 389.
- Hendricks, H. V., poisoning by false morel (*Gyromitra esculenta*), III, 762.
- Hendricks, J. B. See Morgan, A. F.
- Hendricks, S. B., random structures of layer minerals as illustrated by cronstedite, $2\text{FeO} \cdot \text{Fe}_2\text{O}_3 \cdot \text{SiO}_2 \cdot 2\text{H}_2\text{O}$; possible iron content of kaolin, I, 85. Variable structures and continuous scattering of X-rays from layer silicate lattices, I, 198.
- [with Jefferson, M. E.], polymorphism of the micas, with optical measurements, I, 240.
- Nelson, R. A., and Alexander, L. T., hydration mechanism of clay mineral montmorillonite saturated with various cations, I, 397.
- Hendriksen, J. J. M. See Buchem, F. S. P. van.
- Hendrix, J. P., studies of two new substituted vinylbarbituric acids, III, 333.
- Hendry, E., cause of reduction of sugar content of cerebrospinal fluid in meningitis, III, 202.
- Heni, F., treatment of Addison's disease, III, 125.
- Hénin, S. See Caillère, (Mlle.) S.
- Heninger, B. R., and Diekens, K. L., complete auriculo-ventricular block following coronary occlusion, III, 383.
- Henkel, K. See Wittig, G.
- Henkel, W., use of quinine and posterior pituitary extracts in obstetrics, III, 442.
- Henkin, H., and Burton, M., bond strength and potential energy relationships in acetylene, I, 245.
- and Taylor, H. A., reaction of atomic hydrogen with azomethane, I, 165.
- Henne, A. L., and Wiest, E. G., fluorinated derivatives of ethane and ethylene. VI. Corrective data, II, 362.
- Henness, J. R. See Prideaux, E. B. R.
- Hennig, H. See Banmgarten, P.
- Hennion, G. F., and Welsh, C. E., substituted acetylenes and their derivatives. XXXVIII. Chlorides and hydrochlorides from Δ^6 -hexinene, II, 295.
- Hennion, G. F., and Wolf, G. M., substituted acetylenes and their derivatives. XXXIX. Chlorination of the acetylenic alcohols derived from acetone, II, 295.
- See also Froning, J. F., Norris, R. O., and Toussaint, N. F.
- Henriques, F. C., jun., and Noyes, W. A., jun., photochemical studies. XXX. Fluorescence of diacetyl; general considerations governing the study of fluorescence, I, 310.
- See also Kincaid, J. F.
- Henry, C. L. See Lee, C. E.
- Henry, K. M., Houston, J., and Kon, S. K., determination of riboflavin. II. Riboflavin in milk, by fluorimetric and biological methods, III, 513. Vitamin-A and carotene content of short-horn colostrum, III, 914.
- Kon, S. K., and Thompson, S. Y., effect of level of calcium intake on biological value of a protein, III, 748.
- Henry, L. A. M., collisions between gaseous molecules and slow electrons, I, 306.
- Henry, M., antagonistic action of glutathione on anti-coagulant properties of cobra venom, III, 284.
- Henry, N. W. See Belk, W. P.
- Henry, T. H. See Hartley, G. A. R.
- Hensby, G. S. See Braddick, H. J. J.
- Henschel, A. F., influence of neoprontosil on migration of blood leucocytes in tissue cultures, III, 756.
- See also King, J. T.
- Henschke, U., biological and physical basis of red and infra-red therapy, III, 530.
- Hensel, H. M. See Altschuler, S. S.
- Henstell, H. H. See Dameshek, W.
- Hentsch, A., dependence of the intensity of characteristic X-radiation on potential, I, 184.
- Henye, L. G., Doppler effect in resonance lines, I, 335.
- Henze, H. R., and Magee, J. W., 5:5-dimethylhydantoins containing a NRR' substituent, II, 234.
- Whitney, W. R., and Eppright, (Miss) M. A., alkaline hydrolysis of condensation products of hydantoin with aldehydes, II, 192.
- See also Cross, L. B., Magee, J. W., Rogers, B. G., and Speer, R. J.
- Hepburn, H. H., technique for pneumoencephalography, III, 720.
- Hepburn, J. R. I., determination of carbon dioxide in aqueous solution, I, 80. Precipitated basic magnesium carbonate, I, 170. Chemical nature of precipitated basic magnesium carbonate, I, 171.
- Hepler, O. E., Simonds, J. P., and Gurley, H., renal phosphatase in experimental nephropathies, III, 744.
- Hepner, F. R. See Lucas, H. J.
- Heppel, L. A., electrolytes of muscle and liver in potassium-depleted rats, III, 241. Diffusion of radioactive sodium into muscles of potassium-deprived rats, III, 567. Effect of age and diet on electrolyte changes in rat muscle during stimulation, III, 567.
- Herb, R. G. See Hudson, C. M., and Plain, G. J.
- Herbert, D., Gordon, H., Subrahmanyam, V., and Green, D. E. [with Bate-Smith, E. C.], zymohexase, III, 767.
- See also Green, D. E., and Ostern, P.
- Herbst, C., influence of glycerin on determination of sex of *Bonellia*, III, 657.
- Hercik, F., and Zacek, J., formation of "radio-toxins" after irradiation by α -rays, III, 606.
- Herdry, O., jun. See Schwabe, K.
- Heredia, P., effect of sexual hormones on blood-calcium, III, 630.
- Herford, G. F. B. See Grimmett, L. G.
- Herget, C. M., ultrasonic velocity in carbon dioxide and ethylene in the critical region, I, 352.
- See also Hubbard, J. C.
- Herget, R., lymphatic reaction in childhood, III, 880.
- Heringa, C. See Leyns, W. F.
- Heringa, G. C., Leyns, W. F., and Weidinger, A., water adsorption of connective tissue of cornea in adrenal insufficiency, III, 728.
- and Ruyter, J. H. C., action of gonadotrophic hormones in *A*-avitaminotic female rats, III, 651.
- and Weidinger, A., water absorption of cornea, III, 488.
- Herken, H. See Brock, N.
- Herlant, M., effect of progestin on histology of rat pituitary, III, 307. Effect of progestin on gonadotropic potency of rat pituitary, III, 307.
- Herlitz, G., periarteritis nodosa, III, 885.
- Herman, M. See Hutchison, F. S. T., and Roth, N.
- Herman, R. C., vibration spectra and molecular structure. IX. Vapours of fatty acid series, I, 194.
- and Hofstadter, R., dark current of a willemite crystal, I, 311.
- and Williams, V., infra-red absorption spectra of the vapours of DCO_2H and DCO_2D , I, 345.
- Hermann, C. See Brill, R.
- Hermann, H., peripheral vasomotor tone, III, 384.
- Jourdan, F., and Delrieu, A., experimental hypertension and vasoconstrictor substances, III, 16. Effect of inactivation of adrenal medulla on hypertension produced by section of sino-aortic nerves, III, 292.
- Jourdan, F., and Froment, R., paradoxical cardio-inhibitor effects consequent on faradisation of the stellate ganglion, III, 382.
- Jourdan, F., Morin, G., and Vial, J., thermoregulation in dog after destruction of spinal cord, stellate ganglia, and vagi, III, 314. Passage of sympathin into blood, III, 393.
- Morin, G., and Vial, J., diuresis in dogs with spinal cord destroyed, III, 744.
- Hermann, H. E., absorption and expulsion of bile in the gall bladder, III, 312.
- Hermann, P., family with 7 cases of Leber's disease, associated in one case with optic chiasmatic arachnoiditis, III, 399.
- Hermans, J. J., relaxation effects in the double layer; cataphoresis; dielectric constant, I, 114.
- Hermans, P. H., quantitative interpretation of force-extension diagrams of isotropic cellulose threads on the basis of a rational theory of the relation between degree of orientation and strength, I, 71. Mechanism of deformation and fine structure of hydrocellulose. XIII. XIV. Load-extension diagrams of isotropic cellulose fibres from point of view of theoretical relation between anisotropy of swelling, orientation, and load. I. Fibres with different degrees of swelling. II. Fibres prepared in different ways, I, 113.

- Hermans, P. H., similarity of cellulose to caoutchouc and production of artificial cellulose threads as a macromolecular process, II, 268.
- and Platzek, P., refractive power of cellulose as a function of the degree of swelling, I, 15. Optical polarisation analysis of process of deformation of isotropic hydrous cellulose fibres. I. Double refraction in the unswelled state. II. Double refraction in the swelled state, I, 162.
- See also De Booy, J.
- Herr, D. S., and Noyes, W. A., jun., photochemical studies. XXXI. Systematic study of near ultra-violet photochemical decomposition of acetone, I, 417.
- Herrell, W. E. See Harley, R. D.
- Herren, R. Y., visuo-psychic apparatus and accommodation reflex, III, 893.
- Herriek, E. H., and Finerty, J. C., effect of adrenalectomy on anterior pituitaries of fowls, III, 846.
- and Lockhart, C. H., effect of male sex hormone on developing ovaries of young fowls, III, 645.
- Herriek, J. F. See Grindlay, J. H.
- Herrin, R. C., influence of vitamin-A on urea clearance in the rat, III, 419. Gastric emptying time and acidity in avitaminosis-A in dogs, III, 663. Secretion of ammonia by small intestine of dog, III, 741.
- and Nicholes, H. J., effect of vitamin-A on urea clearance in man, III, 667.
- Herring, C., wave functions in crystals, I, 342.
- and Hill, A. G., theoretical constitution of metallic beryllium, I, 385.
- Herring, J. S. See King, E. L.
- Herring, V. See Anderson, E.
- Herrington, B. L., and Krukovsky, V. N., lipase action. I. Lipase action in normal milk. II. Activation of milk lipase by temperature changes. III. Lipase action in milk of individual cows, III, 346.
- Herrington, L. P., heat regulation of small laboratory animals, III, 824.
- See also Nielsen, M., and Winslow, C. B. A.
- Herriott, R. M., Desreux, V., and Northrop, J. H., electrophoresis of pepsin, III, 531.
- Herrlich, H. C. See Martin, S. J.
- Herrmann, G., [diuresis in] heart failure, III, 524.
- and Decherd, G. M., mechanism of cardiac hypertrophy, III, 384.
- See also Calvin, D. B.
- Herrmann, H. See Werle, E.
- Herrmann, J. See Seith, W.
- Herrmann, J. P., pharmacological action of deuterium oxide. VIII. Action on central nervous system, III, 156.
- Herrmann, W., colloid reactions in cerebrospinal fluid diagnosis, III, 300.
- Hershberg, E. B., laboratory electric stirring motor, I, 375. Preparation of tricaprilyn, II, 64.
- and Joshel, L. M., 1- β -styrylacenaphthene, II, 271.
- and Wolfe, J. K., rapid extractor for urinary steroids, III, 618.
- See also Fieser, L. F.
- Hershey, A. V., mobility of potassium ions at high field intensity and low pressure, I, 2. Mobility of ions of high velocity, I, 2.
- Hertel, E., and Lührmann, H., analysis of absorption spectra. I. Physicochemical properties of vinyl (CH_2CH) and divinyl ($\text{CH}_2\text{CH}=\text{CH}_2$) chromophoric groups, I, 6.
- Hertig, A. T., and Edmonds, H. W., genesis of hydatidiform mole, III, 809.
- Hertz, G., and Mende, H., sound-wave pressure in liquids, I, 201.
- Hertz, S., Roberts, A., Means, J. H., and Evans, R. D., radioactive iodine as indicator in thyroid physiology, III, 578.
- Hertzman, A. B., and Dillon, J. B., photoelectric plethysmography of animal tissues, III, 193.
- Hertzog, A. J., Anderson, F. G., and Beebe, G. W., reticulo-endotheliosis with lipin storage, III, 382.
- Hertztriken, S. D., and Faingold, M. A., calculation of diffusion coefficient of mixtures of powdered metals, I, 317.
- Sacharov, I., and Stolper, L., diffusion of zinc into α -brass, I, 317.
- Herwick, R. P. See Bleckwenn, W. J., and Koppányi, T.
- Herzberg, G., Herzberg, L., and Milne, G. G., spectrum of P_2 molecule, I, 400.
- and Mundie, L. G., predissociation of several diatomic molecules, I, 191.
- and Sutton, R. B., tail bands of the Deslandres-d'Azambuja system of the C_2 molecule, I, 281.
- See also Douglas, A. E.
- Herzberg, R. L. See Herzberg, G.
- Herzer, R. W. See Hofmann, W.
- Herzfeld, E. See Verda, A.
- Herzig, A. J. See Blanchard, J. R.
- Herzinger, F., rôle of boron [in soil and plants], III, 546.
- Herzog, F., and Meurer, H., clinical use of pulse wave velocity, III, 193.
- Herzog, G., cloud chamber photographs of cosmic rays up to 29,300 feet, I, 188. Circuit for anti-coincidences with Geiger-Müller counters, I, 235.
- and Bostick, W. H., pair production of mesotrons at 29,000 feet, I, 385.
- Herzog, K., insulin hypersensitivity and intracutaneous sensitivity tests, III, 305.
- Heskett, B. F. See Daro, A. F.
- Hess, C. B., and Gramke, B. E., specific heats of aqueous sodium and potassium chloride solutions at several temperatures. I, 1, 257.
- Hess, H. H., and Phillips, A. H., optical properties and chemical composition of magnesian orthopyroxenes, I, 334.
- Hess, K., soap solutions, I, 211.
- and Engel, W., pectin as a constituent of the cell wall during ontogenesis of cotton fibre, III, 776.
- and Gramberg, W., partly methylated disaccharides. II. Maltose, II, 68.
- and Kwang, H. L., partly methylated disaccharides. III. Cellobiose, II, 68.
- and Lauridsen, L. W., constitution of lichenin. IV, II, 208.
- and Surányi, L. A., measurements of osmotic pressure by means of isothermal distillation; dependence on concentration with simple organic substances in water, I, 26.
- Wergin, W., Kiessig, H., Engel, W., and Philippoff, W., ontogenesis and chemical synthesis of plant cell wall, III, 173.
- Hess, L. See Calingaert, G.
- Hess, M., localisation of acid azo-dyes in tumours, III, 912.
- Hess, V. F., significance of variations in cosmic-ray intensity and their relation to solar, electromagnetic, and atmospheric phenomena, I, 188. Seasonal and atmospheric temperature effect in cosmic radiation, I, 279.
- Hess, W. C. See Sullivan, M. X.
- Hess, W. R., pupil and "between" brain, III, 396.
- Hess, W. W. See Wolfrom, M. L.
- Hesse, E. See Schneider, Armin, and Weibke, F.
- Hesse, F. H. See Langworthy, O. R.
- Hesse, G., irritant substance of *Mimosa pudica*, L., III, 548.
- Hesselink, R. See Waterman, H. I.
- Hesser, F. H., Langworthy, O. R., and Vest, S. A., muscle strength in myotonia atrophica improved by testosterone propionate, III, 390.
- See also Grimmer, R. V.
- Hester, H. R., Essex, H. E., and Mann, F. C., secretion of urine in chicken (*Gallus domesticus*), III, 587.
- See also Code, C. P., and Graham, R.
- Hestrin, S., anti- α -glucosidase, III, 449. Specificity of mould maltase, III, 535.
- See also Leibowitz, J.
- Hetényi, G., mechanism of alimentary hyperlipæmia, III, 56.
- Hetherington, A. W., obesity in the rat following injection of chromic acid into the hypophysis, III, 401.
- and Ranson, S. W., experimental hypothalamic-hypophyseal obesity in the rat, III, 120.
- and Weil, A., lipin, calcium, phosphorus, and iron content of rats with hypothalamic and hypophyseal damage, III, 494.
- Hetherington, D. C., and Craig, J. S., tolerance of chick heart tissues to a time-temperature factor before explantation in tissue culture, III, 281. Effect of frozen-dried plasma and frozen-dried embryo juice on tissue cultures, III, 626. Tissue culture growth stimulants from ground frozen-dried chick embryos, III, 785.
- Hetherington, W. A. See Roepke, R. R.
- Hetland, E. See Frivold, O. E.
- Hettche, H. O., importance of metals in detoxication processes in body, III, 603. Influence of iron, manganese, and copper salts on intoxication with diphtheria toxin, III, 869.
- and Münch, H., silicic acid medium for examination of faeces, III, 774.
- and Strassburger, H., effects of iron, manganese, and copper salts in lethal tetanus and botulinus intoxication of mice, III, 864.
- Hettche, O., silicic acid nutrient media, III, 358.
- Hettig, R. A. See Hahn, P. F.
- Heubner, W., silver and the organism, III, 241. Cumulative effects of digitalis preparations, III, 923.
- and Schreiber, E., effect of ouabain on fibroblasts in culture, III, 467. Effect of copper salts on fibroblasts in culture, III, 467. Effect of histamine on growth of fibroblasts *in vitro*, III, 467.
- Heuer, G. J., and Conway, H., regional and general temperature response following experimentally induced acute inflammation and infection, III, 687.
- Heumann, J. See Matavulj, P.
- Heupke, W., colloid chemistry and dietetics, III, 230.

- Heuser, C. H., chimpanzee ovum in early stage of implantation, III, 874.
- Heuser, G. F. See Schumacher, A. E.
- Heuverswyn, J. van. See under Van Heuverswyn, J.
- Heuyer, M., and Bernard-Pichon, amaurotic idiocy with congenital cataract in two brothers, III, 639.
- Hevesy, G., use of radioactive isotopes of the common elements in physiology, I, 140. See also Hahn, L.
- Hevesy, G. C., Levi, H. B., and Rebbe, O. H., rate of rejuvenation of the skeleton, III, 504.
- and Maclean, I. S., synthesis of phospholipin in raton fat-deficient diet, III, 675.
- Hewett, C. L., polycyclic aromatic hydrocarbons. XXII, II, 212.
- See also Everett, J. L.
- Hewitt, E. A., physiology of reproductive system of the fowl, III, 211.
- Hewitt, J. See Fawcett, G. S.
- Hewlett, L. L. See Irons, J. V.
- Hey, D. H., and Lawton, S. E., nitration of 6- and 7-methoxyacet-2-naphthalene, II, 168. Synthesis of 2-phenyl-naphthalenes, II, 211.
- and Wilkinson, R., preparation of 2-phenyl-naphthalene from diphenyl, II, 303.
- See also Butterworth, E. C., Elks, J., France, H., Haworth, J. W., and Heilbron, I. M.
- Heyberger, L. See Zouckermann, R.
- Heydenburg, N. P., Hafstad, L. R., and Tuve, M. A., scattering of protons by protons. III, I, 51.
- and Roberts, R. B., deuteron-deuteron, proton-helium, and deuteron-helium scattering, I, 51.
- See also Roberts, R. B.
- Heydt, R. von der, familial progressive juvenile cataracts (parathyroid deficiency), III, 639.
- Heyerdale, W. W. See Golden, R. F.
- Heyman, A., infant resuscitation, III, 388.
- Heyman, J., sulphanilamide in subacute bacterial endocarditis, III, 861.
- Heymann, E., and Weber, H. P., distribution equilibrium of sodium between molten sodium halides (NaBr, NaI) and a molten metal phase (Cd, Pb, Tl, Sn, Bi, Sb, Au), I, 67.
- See also Docking, A. R., and McHenry, J. T.
- Heymann, H. See Koch, A.
- Heymann, W., reasons for high carbohydrate requirement of infants and children, III, 918.
- and Modic, J. L., effect of age and fasting on glycogen content of liver and muscle of rats and puppies, III, 150.
- Heymann, C., and Bouckaert, J. J., experimental arterial hypertension, III, 293.
- See also Grimson, K. S.
- Heyningen, W. E. van, stable isotopes as indicators in biology, III, 240.
- Heyrovský, J. See Březina, J.
- Heywood, B. J., and Kon, G. A. R., sapogenins. IX. Occurrence and constitution of bassiac acid, II, 284.
- Hiatt, N., and Adams, L., hyperactive carotid sinus mechanism in auricular flutter, III, 631.
- Hibbard, R. P. See Petering, H. G.
- Hibbert, H., mechanism of plant respiration, III, 616.
- See also Brickman, L., Dorland, R. M., Fisher, J. H., Godard, H. P., Lovell, E. L., Peniston, Q. P., and Perry, S.
- Hibbs, W. G. See Killingsworth, W. P.
- Hibler, F. W., negative after-images of hallucinated colours in hypnosis, III, 723.
- Hickey, J. W. See Mason, C. M.
- Hickling, A., electrode polarisation. III. Rate of growth of polarisation potentials, I, 165.
- and Richards, S. H., electrolytic oxidation. XII. Mechanism of electrolytic formation of periodates, I, 226.
- See also Bruce, J. H.
- Hickman, K. C. D. See Gray, E. Le B.
- Hicks, B. L., Compton line profiles applied to chemical binding, I, 287.
- See also Sage, B. H.
- Hicks, V. See Sidhu, S. S.
- Higasi, K., and Kubo, M., dimorphism of long-chain *n*-alcohols, I, 10.
- Higbee, E., results of colchicine injections [on embryos], III, 835.
- Higginbotham, A. C., amphibian activity. I. Rhythmic activity of *Bufo americanus*, Holbrook, and *B. fowleri*, Hineckley, III, 342.
- Higgins, C. C., recurrence of renal calculi, III, 223.
- Higgins, G. M., bone marrow of rats made anemic by administration of sulphanilamide, III, 627.
- and Machella, T. E., anaemia induced by sulphanilamide in presence of nicotinic acid, III, 862.
- See also Machella, T. E., and Scheifley, C. H.
- Higgins, H. G., and Carroll, (Miss) D., mineralogy of some Permian sediments from [Wandagee] Western Australia, I, 380.
- Higgins, W. D. See Ayres, V. L.
- Hight, A. J. See Tigert, W. D.
- Hightower, D. P. See Spies, T. D.
- Higuti, I., sorption of gases and vapours by titania gel. VII. Sorption and desorption equilibria of organic vapours and a critical condition for capillary condensation phenomena, I, 408.
- Hilberry, H. van N. See Rossi, B.
- Hildebrand, E. See Lauber, H. J.
- Hildebrand, G. J. See Ogden, E.
- Hildebrand, J. H., Wakeham, H. R. R., and Boyd, R. N., intermolecular potential of mercury, I, 59.
- Hildebrandt, F., temperature-independent electrical resistances, I, 395.
- Hilditch, T. P., examination of fatty material from an Egyptian tomb at Armant, III, 225.
- and Murti, K. S., fat of land crabs (Seychelles islands), III, 140. Component acids of ox bone marrow fat, III, 911. Component acids and glycerides of Indian ox depot fats, III, 911.
- Paul, S., Gunde, B. G., and Maddison, L., component glycerides of a typical cow milk fat, III, 814.
- and Pedelty, W. H., effect of prolonged starvation on composition of pig depot fats, III, 238. Body fats of the pig. V. Glycerides of perinephric and outer back fats from same animal, III, 754.
- Hildreth, M. D. See Kramer, M. M.
- Hill, A., analysis of the normal *T* wave, III, 98.
- Hill, A. B. See Todd, E. W.
- Hill, A. E., Durham, G. S., and Ricci, J. E., ternary systems. XXV. Solid solutions of picromerites at 25°, I, 323.
- Hill, A. E., Smith, N. O., and Ricci, J. E., ternary systems. XXIV. Solid solutions of alums at 25°, I, 257.
- Soth, G. C., and Ricci, J. E., systems magnesium chromate-water and ammonium chromate-water from 0° to 75°, I, 412.
- Hill, A. G. See Herring, C.
- Hill, A. J., and Degnan, W. M., dialkyl-acetylbiurets, II, 300.
- See also Cook, E. S.
- Hill, A. V., recovery heat in muscle, III, 106. Mechanical efficiency of frog's muscle, III, 106. Dynamic constants of human muscle, III, 796.
- Hill, C. A., effects on blood from injections of endocrine principles in female, III, 27.
- Hill, D. K., time course of oxygen consumption of stimulated frog's muscle, III, 567. Photo-electric determination of blood-carbon monoxide, III, 706. Anaerobic recovery heat of frog's muscle at 0°, III, 888. p_{H} changes in frog's muscle following activity, III, 888. Oxidative recovery heat of frog's muscle, III, 888.
- Hill, E. F. See Conrad, F. H.
- Hill, E. L., spin angular momenta of elementary particles, I, 342.
- See also Jauch, J. M.
- Hill, E. M. See Kurtz, M. B.
- Hill, F. C. See Jorgensen, M. N.
- Hill, F. T., use of monochord in routine tests of hearing, III, 118.
- Hill, J. See Kerridge, P. M. T.
- Hill, J. P. See Flynn, T. T.
- Hill, J. R., and Pickering, G. W., hypertension produced in rabbit by prolonged renin infusion, III, 476.
- Hill, (Sir) L., penetration of rays through the skin and radiant energy for treatment of wounds, III, 69.
- Hill, L. M., suberin and suberised deposits of diseased potato tubers, III, 366.
- Hill, L. W., immunologic relationships between cow's milk and goat's milk, III, 66. Immunologically altered skin reactivity in non-atopic persons, III, 528. Food allergy in children, III, 774. Allergy in childhood, III, 829.
- Hill, R., and Scarisbrick, R., production of oxygen by illuminated chloroplasts, III, 776. Reduction of ferric oxalate by chloroplasts, III, 829.
- Hill, R. M. See Schultz, F. H.
- Hill, R. T., and Strong, M. T., comparison of synthetic androgens with naturally occurring ovarian androgen in mice, III, 733.
- See also Thomas, H. B.
- Hill, S. E. See Osterhout, W. J. V.
- Hill, T. L., and Branch, G. E. K., resonance and chemistry of histidine, I, 148.
- See also Branch, G. E. K.
- Hill, W. H. P., and Andrus, E. C., effect of renin and of angiotonin on isolated perfused heart, III, 711.
- Hill, W. K. See Angus, W. R.
- Hill, W. R., and Montgomery, H., regional changes and changes caused by age in normal skin, III, 911.
- See also Urbach, E.
- Hill, W. T., and Myers, G. S., effect of 933 F. on heart of frog and cat, III, 152.
- Hillel, R. See Späth, E.
- Hiller, A. See Van Slyke, D. D.
- Hiller, S., so-called "colonial nervous system" in Bryozoa, III, 20.
- Hilles, C. See Schmidt, L. H.
- Hillier, J. See Burton, E. F.

- Hillis, F. W., McReynolds, R. C., and Feiring, E. B., evidence of krypton in iodyrite, I, 180.
- Hills, G. M., thiochrome test for urinary aneurin as index of nutritional level, III, 144. Metabolism of articular cartilage, III, 745. Ammonia production by pathogenic bacteria, III, 768.
- Hilmers, G., disturbances of lactic acid metabolism during glycogen breakdown, III, 150.
- Hilseh, R., optical absorption of superconducting layers of tin, I, 102. Cloud chamber for lecture experiments, I, 134.
- Himel, C. M. See Marvel, C. S.
- Himmelsbach, C. K., addiction characteristics of (a) dihydromorphine ("paramorphin"), (b) dihydrodeoxymorphine-D ("desomorphine"), (c) dihydrodeoxycodine-D ("desocodine"), and (d) methyl dihydromorphinone ("metopon"), III, 63.
- Himsworth, H. P., surgery in diabetic patients, III, 327. Insulin deficiency and insulin inefficiency, III, 899.
- and Kerr, R. B., insulin-sensitive and insulin-insensitive types of diabetes mellitus, III, 578. Age and insulin-sensitivity, III, 578.
- and Maizels, K., vitamin-D₂ and -D₃ and A.T. 10 [in parathyroid deficiency], III, 895.
- Himwich, H. E., Bowman, K. M., Goldfarb, W., and Fazekas, J. F., cerebral metabolism during fever, III, 201. Temperature and brain metabolism, III, 890.
- Fazekas, J. F., and Nesin, S., glucose and lactic acid exchanges during hypoglycemia, III, 239.
- Frostig, J. P., Fazekas, J. F., and Hadidian, Z., mechanism of [cerebral] symptoms of insulin hypoglycemia [in schizophrenia], III, 486.
- Spies, T. D., Fazekas, J. F., and Nesin, S., cerebral carbohydrate metabolism during deficiency of various members of the vitamin-B complex, III, 717.
- See also Alexander, F. A. D., Fazekas, J. F., Lewy, F. H., and Sykowski, P.
- Hind, H. G., colouring matter of *Penicillium carminoviolaceum*, Biourge; production of ergosterol by the mould, II, 99. Constitution of carviolin, a colouring matter of *Penicillium carminoviolaceum*, Biourge, II, 227.
- See also El Sadr, M. M.
- Hind, H. W. See Goyan, F. M.
- Hindley, N. C. See Aldersley, J. B.
- Hines, E. A., jun., significance of vascular hyper-reaction as measured by cold-pressor test, III, 634. Hereditary factor and subsequent development of hypertension, III, 793. Development of hypertension, III, 886.
- See also Allen, E. V., and Gardner, J. W.
- Hines, H. M., and Knowlton, G. C., effect of age on cellular phases of skeletal muscle, III, 106. Effect of various conditions on rate of atrophy in denervated muscle, III, 390.
- See also Knowlton, G. C., and McClintock, J. T.
- Hines, L. E., Hoover, A. H., and Graff, E., sulphanilamide and fibrinolytic activity of hæmolytic streptococci, III, 676.
- Hinglais, H. See Meunier, P.
- Hingson, R. A. See Ferguson, C.
- Hinkel, L. E., and Watkins, T. I., hydrogen cyanide. XI. Constitution of double compound of hydrogen cyanide and aluminium chloride. XII. Asymmetry of the tetrapolymeride of hydrogen cyanide, I, 265; II, 366.
- Hinsberg, K., Merten, R., and Mucke, K., diagnostic value of carcinoma reactions, VI, 111, 317.
- Hinsey, J. C., Hare, K., and Phillips, R. A., sensory components of phrenic nerve of cat, III, 21.
- and Phillips, R. A., diaphragmatic sensation, III, 569.
- See also Corbin, K. B.
- Hinshaw, H. C., chemotherapy in pneumonia, III, 860.
- and Moersch, H. J., sulphapyridine in treatment of post-operative pneumonia, III, 676.
- Hinshelwood, C. N. See Danby, C. J., Davoud, J. G., Lodge, R. M., and Smith, R. E.
- Hinsie, L. E. See Strongin, E. I.
- Hintenberger, H., secondary electron emission and charge phenomena in insulators, I, 58.
- Hinz, H. See Mumm, O.
- Hippel, A. von, conductivity of insulators and its interpretation, I, 403.
- and Davisson, J. W., propagation of electron waves in ionic single crystals, I, 147.
- See also Buehl, R. C.
- Hiramoto, M., and Watanabe, Kazuo, constituents of *Catalpa ovata*, G. Don., III, 548.
- Hirano, N., and Koyama, C., optimum p_H and action of enzymes on epidemic encephalitis virus, III, 267.
- Hirano, S., and Hirasawa, K., male sexual hormone. X. In egg yolk, III, 32.
- and Yamonoi, R., male sexual hormone. IX. In ox blood, and in pig's prostate and testicles, III, 32.
- Hirano, T., influence of pilocarpine on adrenaline output in dogs and cats, III, 498.
- Hirasawa, K. See Hirano, S.
- Hirasawa, N. See Uemura, T.
- Hirata, T., Honda, K., Nakamura, Y., and Yamafuji, K., composition of plants in Taiwan, III, 549.
- Hire, C., photographic measurements of the Brownian motion, I, 210.
- Hiroki, H., hypersensitivity to toxins, III, 172.
- Hiromoto, T., formation of lactic acid from alanine under anaerobic conditions in eggs, III, 808.
- Hirone, T., and Matuda, S., change of thermal conductivity of bismuth single crystals due to magnetic field, I, 18. Order-disorder transformations in ternary alloys, I, 408.
- See also Honda, K.
- Hirooka, T. See Chen, T. T.
- Hirose, Z., denaturation of sericin. I. Denaturation by boiling water, III, 505.
- Hirsch, A. A., hot wire cutter for glass tubing, I, 176.
- Hirsch, C., new labyrinthine reaction: waltzing test, III, 492.
- Hirsch, E. F., and Morgan, R. H., causal significance to traumatic ossification of fibrocartilage in tendon insertions, III, 698.
- See also Weinhouse, S.
- Hirsch, G. C., rôle of vitamin-C in cellular synthesis, III, 324.
- Hirschbold-Wittner, F. See Hönigschmid, O.
- Hirshfelder, J. O., structure of liquids, I, 100. Calculating moments of inertia, I, 284.
- Hirsh, F. R., jun., double ionisation by the Auger effect: cause of a satellite intensity anomaly for the X-ray diagram line Ma_1 , I, 276. Thin quartz crystals as used in the Cauchy focussing X-ray spectrograph, I, 394.
- Hirshberg, M. S. See Thenebe, C. L.
- Hirshberg, Y. See Farkas, L.
- Hirsheimer, A., hippuric acid excretion test in pregnancy, III, 128.
- Hirshon, S. See Hauser, E. A.
- Hirst, D. V. See Hamlen, E. C.
- Hirst, E. L., Jones, J. K. N., and Jones, (Miss) W. O., structure of alginic acid, II, 35.
- See also Bawn, C. E. H., Beaven, G. H., Carrington, H. C., and Haworth, W. N.
- Hirst, J. P. H. See Bell, R. P.
- Hirwe, N. W., and Rana, K. N., dehydration product of chloral-3:5-dichlorosalicylamide, II, 129. Chloral-amides; reaction of phosphorus pentachloride on chloral-chlorosalicylamides and their methyl ethers, and reactivity of the chlorine atom, II, 220.
- Hisaw, F. L. See Abramowitz, A. A., Fevold, H. L., and Mossman, H. W.
- Hisey, A., and Morrison, D. B., oxygen uptake of dried haemoglobin, III, 105.
- Hiskey, C. F., and Meloche, V. W., colour phenomena associated with quinevalent molybdenum solutions. I. Absorption spectra in solutions of various hydrochloric acid concentrations, I, 344. Nature of the thiocyanate complex of molybdenum, I, 369. Determination of rhenium in molybdenite minerals, I, 445.
- Springer V. F., and Meloche, V. W., effect of hydrochloric concentration on reduction of molybdate in the silver reductor, I, 36.
- Hitchcock, A. E., and Zimmerman, P. W., unusual physiological responses induced in intact plants by capping with black cloth, II, 363. Effects obtained with mixtures of root-inducing substances, III, 830.
- See also Zimmerman, P. W.
- Hitchen, O. See Sutton, R. W.
- Hitchings, G. H., and Subbarow, Y., rat growth factors of filtrate fraction of liver extracts, III, 321.
- Hixson, A. W., and Stetkewicz, J. D., titanium sulphate solutions; refractive index and viscosity measurements, I, 354.
- Hiyama, S. See Ishida, Y.
- Hjärre, A. See Carlström, B.
- Hjort, A. M., De Beer, E. J., Buck, J. S., and Fassett, D. W., pharmacological properties of unsymmetrical ethyl-o-ethylphenylurea, III, 333.
- De Beer, E. J., and Fassett, D. W., hypnotic effect of repeated injections of unsymmetrical ethyl-o-ethylphenylurea in albino rats and influence of sex thereon, III, 333. Tetrahydroisoquinolines; relative lethal and circulatory effects of 2-alkyl derivatives. IV. Circulatory adrenolytic effects, III, 337.
- Hjorth-Hansen, S., silicic acid substrates for microbiological use, III, 79.
- Hnizda, V. See Calingaert, G.
- Ho, C. H. See Kuo, P. T.

- Hoag, J. B., production and half-life of ^{35}Cl , I, 308.
and Glathart, J. L., outer initial permeability of Ni for 10—70 M-cycles, I, 152.
See also Rossi, B.
- Hoagland, C. L. See Edwards, J. C., Lavin, G. I., and Thompson, L. D.
- Hoagland, D. R., minute amounts of chemical elements in relation to plant growth, III, 776.
and Steward, F. C., salt absorption of plants, III, 361.
See also Stout, P. R.
- Hoagland, H. See Hadidian, Z.
- Hoagland, R., and Snider, G. G., synthesis of fat from protein by albino rats, III, 433.
- Hoar, W. S., thyroid gland of Atlantic salmon, III, 836.
- Hoare, F. E., radiation correction in calorimetry, I, 132.
- Hobart, G. See Davis, H.
- Hobart, H. M. See Dolgopol, V. B., and Kohn, J. L.
- Hobbs, M. E., Jacokes, J. W., and Gross, P. M., electric moments of molecules, I, 272.
See also Maryott, A. A.
- Hobby, G. L. See Dawson, M. H., and Meyer, Karl.
- Hobday, G. I. See Gulland, J. M.
- Hoberman, H. D. See Rittenberg, D.
- Hobson, A. See Bor, J.
- Hobson, F. C. G., and Witts, L. J., platelet-reducing extracts of spleen, III, 288.
- Hobson, G. V., development of the mineral deposit at Mawchi [Burma] as determined by its geology and genesis, I, 422.
- Hoch, H., micro-Kjeldahl apparatus, I, 421.
- Hoch-Ligeti, C., effect of carcinogenic hydrocarbons in elimination of Congo-red from circulation, III, 854.
- Hochberg, J., and Bonhoeffer, K. F., hydrogen exchange of dimethylsulphone and sodium methylsulphonate in alkaline solution, I, 30.
- Hochgesang, F. P. See Anderson, H. V.
- Hochman, A. See Zondek, B.
- Hochrein, M., cardiological problems in athletes, III, 383.
and Dinischiotu, G. T., pathogenesis of bronchial asthma, III, 17.
- Hochstein, E. See Solomon, H. A.
- Hochwald, A. See Gajdos, A.
- Hock, A., digestion of various starches, III, 426.
- Hock, C. W. See Avery, G. S., jun.
- Hockett, R. C. See Cramer, F. B.
- Hodenberg, D. von, physical fitness in diabetics, III, 305.
- Hodes, H. L., Gimbel, H. S., and Burnett, G. W., sulphapyridine in pneumococcal meningitis, III, 243.
- Hodes, R., exercise in sympathectomised cat, III, 110.
and Steiman, S. E., effects of acetylcholine and eserine on frog muscle, III, 196.
See also Haimovici, H.
- Hodge, E. B., vapour pressures for six aliphatic nitro-compounds, I, 314.
- Hodge, H. C., and Finn, S. B., reduction in experimental rat caries by fluorine, III, 277.
See also Manly, R. S., and Volker, J. F.
- Hodge, M. W. See Driscoll, R. I.
- Hodges, F. J., Roentgen procedures in cardiac diagnosis, III, 383.
- Hodgins, J. W. R. See Breckenbridge, J. G.
- Hodgkin, A. L., and Huxley, A. F., action potentials recorded from inside a nerve fibre, III, 20.
- Hodgson, E. R. See Bleckwenn, W. J.
- Hodgson, H. H., absorption spectra of substituted nitrosobenzenes; evidence for mesomeric effect, I, 56. Preparation of *m*-halogenophenols, II, 78.
and Foster, C. K., decomposition of *p*-hydroxybenzenediazonium salts by alcohols, II, 341.
and Marsden, E., probable solvation of aniline hydrochloride, aniline hydroiodide, and α -naphthylamine hydroiodide in aniline solution; simple mathematical treatment, I, 162. Replacement of diazo-group by hydrogen, II, 126. Diphenyl series. V. Preparation of asymmetrical diaryl derivatives, II, 126.
and Nicholson, D. E., nitrosation of *m*-halogenophenols and their conversion into benzoquinonemonoximes, II, 12. Action of nitrosylsulphuric acid on *m*-fluorophenol; new red *o*-quinoneimine, II, 135. Nitrosation of phenols. XVII. *o*-Fluorophenol, and a comparative study of the four *o*-halogenophenols. XVIII. Synthesis of 3-fluoro-4- and -6-nitrosophenol; comparison of the stabilities of 3-halogeno-4-nitrosophenols, II, 275, 341.
- Hodgson, T. See Riebsomer, J. L.
- Hodson, A. Z., and Norris, L. C., fluorometric determination of riboflavin content of foodstuffs, III, 233.
- Höber, R., secretory activity of isolated Ringer-perfused frog liver. I. Differential secretion of pairs of dyes, III, 135.
and Briscoe-Woolley, P. M., correlation between renal excretion and molecular structure of dyestuffs, III, 41. Conditions determining selective secretion of dyes by isolated frog kidney, III, 418.
and Moore, E., secretory activity of isolated Ringer-perfused frog liver. II. Inhibitory and promoting influence of organic electrolytes on secretion of dyes, III, 135.
- Höfer, H. See Briner, E.
- Hoefel, H. F., effect of adding chlorobutanol to bismuth subsalicylate in oil injected intramuscularly, III, 442.
- Hoefel, P. F. A. See Putnam, T. J.
- Högberg, B. See Euler, H. von, and Schlenk, F.
- Högberg, H. See Lamm, O.
- Höger, D., transport and point of attack of tetanus toxin in local tetanus, III, 171.
- Hoehn, H. H. See Evans, H. M., and Smith, L. I.
- Hoehn, W. M., and Mason, H. L., preparation and degradation of lithocholic acid, II, 175.
- Hoekstra, R. A., and Haex, A. J. C., prontosil in plasma and serum, III, 151.
- Höltje, R. [with Scheer, A., and Opitz, C.], separation of iron and manganese by the acetate process; p_H measurements; influence of H_2O_2 , I, 233.
and Schlegel, H., phosphonates. IV. Action of phosphine on cuprous, silver, and aurous halides, I, 229.
- Hölzl, H., micro-organisms in snow, III, 768.
- Hönigschmid, O., at. wt. of holmium, I, 139.
and Hirschbold-Wittner, F., at. wt. of phosphorus; analysis of phosphorus oxybromide, I, 277.
See also Baxter, G. P.
- Hönl, H. See Papapetrou, A.
- Hoesslin, H. von, treatment of migraine, III, 202. [Treatment of nephrosis with liver extracts], III, 222. Coronary insufficiency, cardiac failure, and angina pectoris, III, 563.
- Höter, H. See Rabe, P.
- Høygaard, A., and Rasmussen, H. W., vitamin-C sources in Eskimo food, III, 53.
- Hof, T. See Kluyver, A. J.
- Hofe, C. von. See Richtzenhain, H.
- Hofe, K. von, lipin content of blood in diabetics with retinal changes, III, 791.
- Hofer, K., effect of irradiated electrical energy on crystallisation, I, 249.
- Hofer, L. J. E. See Lewis, J. R.
- Hoff, H., and Shaby, J. A., adrenal cortical extract in acute confusional states, III, 409.
- Hoff, H. E., Smith, P. K., and Winkler, A. W., relation of blood pressure and concentration in serum of potassium, calcium, and magnesium, III, 386.
See also Smith, P. K., and Winkler, A. W.
- Hoffer, O. See Chrétien, A.
- Hoffleit, D., cyanogen discriminant between giant and dwarf stars, I, 144.
- Hoffman, C., Schweitzer, T. R., and Dalby, G., fungistatic properties of the fatty acids and possible biochemical significance, III, 351. Comparison of fungistatic properties of cinnamaldehyde and cinnamic acid as related to their possible anticarcinogenic effect, III, 590. Effect of chlorine substitution on the fungistatic properties of acetic and propionic acids, III, 610.
- Hoffman, C. E., relation of *Donacia* larvae (Chrysomelidae: Coleoptera) to dissolved oxygen, III, 746.
- Hoffman, E. L. See Freeman, G. L.
- Hoffman, G. R. See Smith, H. P., and Ziffren, S. E.
- Hoffman, J. G., and Livingstone, M. S., collimation of slow neutrons, I, 337.
- Hoffman, J. I., and Lundell, G. E. F., separation and colorimetric determination of rhenium and molybdenum, I, 39.
- Hoffman, M. M. See Heard, R. D. H.
- Hoffman, R. S., Tenenbaum, E., and Doljanski, L., growth activation of cell colonies *in vitro* by extracts of adult tissues, III, 88. Growth-stimulating effects of extracts of normal adult tissues and tumours, III, 424.
See also Doljanski, L.
- Hoffman, S. J. See Meyer, K. A.
- Hoffman, W. A. See Hurd, C. D.
- Hoffman, W. S., photo-electric study of Liebermann-Burchard reaction and its significance in determination of cholesterol, III, 620. Photo-electric standardisation of potassium permanganate solutions, III, 779. Photo-electric micro-determination of nitrogenous constituents of blood and urine by direct nesslerisation, III, 779. Micro-photo-electric method for urea determination in blood and urine by direct nesslerisation, III, 779.
- Hoffmann, A. E. See Schoch, E. P.
- Hofmann, G., tissue penetrability for red and infra-red rays, III, 446.

- Hofmann, H. See Janke, A.
- Hofmann, K., and Bergmann, M., specificity of carboxypeptidase, III, 765.
- Hofmann, P. See Meerwein, H.
- Hofmann, W., and Herzer, R. W., solid solubility of chromium in aluminium containing up to 2% of magnesium, I, 317.
- Hofmans, A., physiological properties of the preputial muscle in dogs, III, 390.
- Hofrichter, C. H., jun. See Post, H. W.
- Hofstadter, R. See Herman, R. C.
- Hogan, A. G., and Parrott, E. M., anaemia in chicks caused by a vitamin deficiency, III, 320.
- and Richardson, L. R., simplified rations for chicks, III, 511.
- See also Richardson, L. R.
- Hogan, M. J. See Cordes, F. C.
- Hogben, L., and Landgrebe, F., pigmentary effector system. IX. Receptor fields of teleostean visual response, III, 490.
- Hogden, C. G. See Robinson, H. W., and Wang, C. C.
- Hogg, A. R., intermediate ions of the atmosphere, I, 51.
- Hogg, B. M. See Chargaft, E., and Gutman, A. B.
- Hogge, E. See Garrett, A. B.
- Hoglan, F. A., and Bartow, E., preparation and properties of derivatives of inositol, II, 376.
- Hogness, T. R. See Junowicz-Kocholaty, R.
- Hohenemser, W. See Meyer, K. H.
- Hohn, J., water-blue as indicator in type determination of diphtheria bacilli, III, 168. Egg culture medium for tubercle bacillus; cap for culture tubes, III, 773.
- Hohor, V. See Grimaldski, V.
- Hoi, B., diarylphthalides derived from dialkylanilines, II, 278. Purgative properties and chemical constitution, III, 601.
- Hoisington, L. E., Share, S. S., and Breit, G., effects of shape of potential energy wells detectable by experiments on proton-proton scattering, I, 5.
- See also Thaxton, H. M.
- Hoitink, A. W. J. H., colloid osmotic pressure of plasma and composition of blood after acute hæmorrhage and after hæmorrhage followed by (I) intravenous injection of a 0.9% salt solution, (II) injection of gum-salt solution, III, 380. Relationship between spleen and colloid osmotic pressure and plasma-lipins after acute hæmorrhage, III, 382.
- Højø, T. See Tomita, C.
- Holaday, D. A., preparation of aurintricarboxylic acid, II, 221.
- Holbrook, A. A., and Watson, M. V., blood viscosity with special reference to capillary, arterial, and venous blood specimens, III, 283.
- Holbrook, W. P. See Hench, P. S.
- Holcomb, J. H., jun. See Hall, R. T.
- Holcomb, W. F. See MacCorquodale, D. W.
- Holden, A. N., and Mason, W. P., elastic, dielectric, and piezoelectric constants of heavy-water Rochelle salt, I, 101.
- Holden, R. B., vascular reactions of uterus of immature rat, III, 212.
- Hole, W. L., and Wright, R. W., emissive and thermionic characteristics of uranium, I, 17.
- Holl, F. J., Simon, A. J., and Hector, L. G., effect of short-wave irradiation on *Trichinella spiralis*, III, 446.
- Hollaender, A., Cole, P. A., and Brackett, F. S., absorption and fluorescence spectra in relation to photolethal action of methylcholanthrene on yeast, III, 73.
- See also Dalla Valle, J. M.
- Holland, D. O. See Stewart, G. W.
- Holland, G. A., reactions from sodium morrhuate in sclerosing of varicose veins, III, 255.
- Holland, W. E. See Fuson, R. C.
- Hollander, A., centrifuge technique in heterophile agglutination test [of serum], III, 379.
- Hollander, F., factors which reduce gastric acidity, III, 34.
- and Penner, A., history and development of gastric analysis, III, 132.
- Penner, A., Saltzman, M., and Glickstein, J., secretory studies in whole stomachs; determination of phenol-red in gastric contents, III, 740.
- See also Klempner, E., and Penner, A.
- Hollborn, W., silicic acid media in determination of micro-organisms in water, III, 774.
- Holleck, L., peculiarities in the [polarographic] current-voltage curve for europium salt solutions and structure of the solutions, I, 324.
- Hollett, A. See Hayes, F. R.
- Holley, C. E., jun. See Wall, F. T.
- Holley, K. T., and Dulin, T. G., influence of boron on flower-bud development in cotton, III, 546.
- Holling, H. E., oxygen content of venous blood from arm vein and oxygen consumption of resting human muscle, III, 478.
- Hollingshead, E. A., and Gordon, A. R., variation of the differential diffusion constant of sulphuric acid with temperature, I, 316.
- Hollinshead, W. H., origin of nerve fibres to glomus aorticum of cat, III, 483. Chromaffin tissue and paraganglia, III, 697. Blood supply of supracardial bodies in kitten, III, 697.
- Hollnsteiner, H., treatment of Graves' disease, III, 303.
- Holloway, M. G., and Bethe, H. A., cross-section of the reaction $^{15}\text{N}(p, \alpha)^{12}\text{C}$, I, 278.
- Holly, O. M. See Perla, D., and Sandberg, M.
- Holm, G. E. See Kurtz, F. E.
- Holm, K. See Günther, P.
- Holm, S., concomitant squint in the bush negroes of Gabon (French Equatorial Africa), III, 396.
- Holman, H. H. See Gordon, W. S.
- Holman, R. L., and Mebane, G., influence of nitrogen retention on regeneration of plasma-proteins, III, 471.
- Holman, W. L. See Jackson, S. H.
- Holmberg, B., stereochemistry. XXI. Diastereoisomeric phenyl β -carboxyethyl sulphoxides, II, 210. [Interaction of] styrene and organic disulphides [in presence of] iodine, II, 215.
- Holmberg, C. G., purification and properties of uricase, III, 162.
- Holmes, A., basaltic lavas of South Kivu, Belgian Congo, I, 380.
- Holmes, B. E., inhibition of glucose breakdown in tumour tissue and retina extracts by fluoride, III, 747.
- Holmes, C. A. See Beaton, L. E.
- Holmes, C. E. See Baumann, C. A.
- Holmes, E., effect of toxæmia on metabolism, III, 431.
- Holmes, E., and Lehmann, H., relationship of lesions of the adrenal gland to diphtheritic toxæmia, III, 846.
- See also Ostern, P.
- Holmes, E. M. See Richardson, John R.
- Holmes, F. E., mercury-sealed vessels for storage of solutions, I, 377. Apparatus for maintaining constant levels in a water-bath and a distilling flask, I, 395.
- Holmes, F. O., extension of binomial system of nomenclature to include viruses, III, 358.
- Holmes, F. W., and Davenport, H. A., number of neurites in dorsal and ventral roots of cats, III, 797.
- Holmes, G., cerebellum of man, III, 637.
- Holmes, H. N., practical model of animal cell membranes, III, 259.
- and Corbet, R. E., crystalline constituents of non-saponifiable fraction of bone marrow, III, 281.
- Holmes, M. E., case of hæmochromatosis with almost complete absence of skin pigment, III, 435.
- Holmes, O. See Garrett, A. B.
- Holmgren, H., chromotropic (metachromatic) substance in human fœtus, III, 372. Growth changes of pronator quadratus, III, 372.
- See also Edlund, Y.
- Holmin, N. See Carlström, B.
- Holota, J. See Janke, A.
- Holst, G., colour reactions of sulphur chlorides S_2Cl_2 and SCl_2 with *o*-tolidine and their analytical application, I, 130. Alkaline hydrolysis of the sulphur chlorides (S_2Cl_2 and SCl_2) in alcoholic solution, I, 259.
- Holst, S., and Turner, C. W., lactogen content of pituitary of pregnant and lactating rabbits and guinea-pigs, III, 404.
- Holt, J. See Walke, H.
- Holt, J. P., and Lawson, H., relationship between vascular volume and blood flow in hind limb of dog, III, 193.
- Holt, M. L., and Gray, A. G., volumetric determination of tungsten, I, 270.
- Holter, H. See Linderström-Lang, K.
- Holtfreter, J., analysis of morphogenetic factors in amphibian development. II. Processes occurring in rudiments of mesodermal organs, III, 86.
- Holtorf, A. F., and Koch, F. C., colorimetric determination of 17-ketosteroids in urine extracts, III, 946.
- Holtz, F., ultra-violet ray carcinoma and sarcoma, III, 506.
- Holtz, P., dopadecarboxylase, III, 162.
- Reinhold, A., and Credner, K., enzymic degradation of L-dihydroxyphenylalanine (dopa) by liver and intestine, III, 345.
- Holway, A. H., and Boring, E. G., moon illusion and angle of regard, III, 398.
- See also Crozier, W. J.
- Holweck, F., Luria, S., and Wollman, E., effect of radiations on bacteriophages, III, 690.
- See also Wollman, E.
- Holyoke, E. A., potentialities of embryonic spleen as shown by homoiotransplants into the omentum of the adult rabbit, III, 782.
- Holzapfel, L. See Günther, P., and Kausche, G. A.
- Holzhausen, H. G., effect of digitalis glucosides on viscosity of muscle-proteins, III, 523.
- See also Dybing, O.

- Homan, J. D. H. See Backer, H. J.
Homburger, E. See Barlow, O. W.
Homès, M. V., ionic exchange between dahlia tissue and mineral solution, III, 691.
Homeyer, H. See Janzen, R.
Honda, K., Hirone, T., and Hori, N., changes of electrical resistance due to magnetisation of single crystals of iron and nickel, I, 387.
See also Hirata, T.
Honess, R. F., effect of X-rays on coccidia of the rabbit, III, 69.
Hood, D. B. See Gurin, S.
Hook, E. O., Miner, (Miss) H. I., and Coghill, R. D., thiamorpholine [thiazane, tetrahydro-1:4-thiazine] series. III. Derivatives of tetrahydro-1:4-thiazine-3:5-dicarboxylic acid, II, 315.
See also Miner, (Miss) H. I.
Hooker, C. W., and Collins, V. J., androgenic action of deoxycorticosterone, III, 411.
Gardner, W. U., and Pfeiffer, C. A., oestrogens and testicular tumours in mice, III, 903.
and Williams, W. L., retardation of mammary involution in mouse by irritation of the nipples, III, 905.
See also Dick, M., and Sprunt, D. H.
Hooper, F. E., disintegration of cell membrane of cotton fibre by a pure culture of bacteria, III, 74.
Hooton, E. A., stature, head form, and pigmentation of adult male Irish, III, 624.
Hoover, A. H. See Hines, L. E.
Hoover, S. R., and Allison, F. E., growth metabolism of *Rhizobium* and interrelationships between respiration and synthesis, III, 687.
See also Ludwig, C. A.
Hopf, H. S. See Fraenkel, G.
Hopfield, J. J., new absorption bands of water vapour in the extreme ultraviolet, I, 386.
Hopkins, I. I., Dickerson, R. T., and Nielsen, W. M., practical applications of electronic control principles to the operation of a Wilson cloud chamber, I, 376.
Hopkins, R., Black, S. H., and Ross, H., xanthelasma [and blood-lipin] in leprosy, III, 188.
Hopkinson, F. J. See Wernimont, G.
Hopp, G. See Schmidt, A. W.
Hopper, V. D. See Laby, T. H.
Hopson, E. M. See Sharpless, G. R.
Hopwood, F. L., Salaman, M. H., and McFarlane, A. S., effect of ultrasonic vibration on vaccinia virus, III, 172.
See also Loewenthal, H.
Hora, F. B. See James, W. O.
Hora, J. See Finkelman, I.
Horack, H. M. See Pepper, D. S.
Horan, T. N. See Kimball, O. P.
Horan, V. G., and French, S. G., sulphanilamide in acute otitis media, III, 677.
Horecker, B. L., inhibition of succinic dehydrogenase by copper, III, 344.
Horgan, E. S., and Kirk, R., antimony treatment of kala-azar, III, 443.
Hori, C. G. See Heckel, N. J.
Hori, N., magnetic properties of nickel and its alloys, I, 352.
See also Honda, K.
Hori, T. See Asami, Y.
Horiba, S., and Goto, R., explosive reactions of gases. I. Thermal explosion of oxy-hydrogen gas at low pressures, I, 414.
Horii, Z., syntheses of 5:6- and 5:8-dihydroxyflavone and constitution of primetin, II, 231. Synthesis of 5:6:4'- and 5:8:4'-trihydroxyflavone, II, 330.
Horiuchi, R., Otsuki, H., and Okuda, O., constitution of two new terpenes, menogene and menogrene ($C_{16}H_{16}$ and $C_{16}H_{14}$); mechanism of cyclisation of citronellal and citral, II, 97.
Horiuti, J., mechanism of hydrogen electrode process, I, 362.
Horn, L., and Masing, G., nucleus formation in molten metals, I, 314.
Horn, M. J., and Jones, D. B., isolation of a crystalline selenium-containing organic compound from plant material, III, 461.
Hornbostel, J., Goldsmith, H. H., and Manley, J. H., resonance levels of rhodium and indium, I, 338.
Horne, G., and Scarborough, H., vitamin-P and capillary resistance, III, 884.
Horner, J. W., jun. See Smith, L. I.
Hornbrook, J. W., cultivation of phase I *Haemophilus pertussis* in a semi-synthetic liquid medium, III, 264.
Horning, E. C. See Fuson, R. C.
Horning, E. S. See Cramer, W. C.
Hornor, A. P., jun., magnetite and hematite veins in Triassic lavas of Nova Scotia, I, 179.
Hornung, H., disinfectants, III, 61.
Hornus, G., and Grabar, P., precipitation of the sugar hapten-O of *B. typhosus* by immune rabbit serum, III, 357.
Horowitz, N. H., partition of nitrogen in developing eggs of *Urechis caupo*, III, 279. Respiratory pigment from eggs of marine worm, III, 649. Respiratory metabolism of developing eggs of *Urechis caupo*, III, 783. Comparison of oxygen consumption of normal embryos and dauerblastulae of sea urchins, III, 783.
Horsburgh, D. B., Tatum, E. L., and Hall, V. E., chemical properties and physiological actions of *Triturus* embryonic toxin, III, 444.
Horsfall, F. L., characteristics of protein boundaries as shown by scale method electrophoretic diagrams, I, 72.
and Lennette, E. H., complex vaccine effective against different strains of influenza virus, III, 773.
Horsfall, F. L., jun., Hahn, R. G., and Rickard, E. R., influenza epidemics: experimental study, III, 543.
See also Tiselius, A.
Horsley, J. S., pentothal acid: new basal anaesthetic, III, 926.
Horst, C. J. van der, and Gillman, J., mechanism of ovulation and corpus luteum formation on *Elephantulus*, III, 739.
Horster, H. See Rietschel, H.
Horstmann, E., development of intrahepatic bile ducts, III, 86.
Hortenstine, J. C. See Ludwig, S.
Horton, B. T., relationship of hypertension to renal neoplasia, III, 793.
See also MacLean, A. R., Peters, G. A., Sheard, C., Shelden, C. H., and Ward, C. E.
Horton, J. W. See Woodbridge, P. D.
Horton, P. B. See Curtis, A. C.
Horvath, W. J. See Salant, E. O.
Horwitt, M. K., anti-tryptic properties of heparin, III, 866.
See also Dorfman, A., and Finkelman, I.
Horwitz, W., theory of electrokinetic phenomena, I, 114.
Horwitz, W. A. See Polatin, P.
Hosemann, R., theory of X-ray scattering by particle clusters, I, 12. X-ray photographic method for determining the submicroscopic fine structure of substances; the cellulose model, I, 62.
Hosen, H., thyroid deficiency in twins, III, 496.
Hoshall, E. M., [determination of] sulphanilamide, II, 60.
Hosking, J. S., constitution and classification of the clay minerals, I, 397.
Hoskins, R. G., and Bevin, S., effect of oestriol glucuronide on spontaneous activity of senile male rats, III, 654.
and Small, R., influence of diethylstilbestrol on spontaneous activity of male rats, III, 903.
Hoskins, W., and Webster, B., nature of urinary androgens of castrate men, III, 733.
Hostetler, E. H. See Halverson, J. O.
Hotchkiss, R. D., determination of peptide bonds in crystalline lactoglobulin, III, 308.
and Dubos, R. J., fractionation of the bacterial agent from cultures of a soil bacillus, III, 352. Chemical properties of bactericidal substances isolated from cultures of a soil bacillus, III, 352.
Hottinger, A., use of nutracid (lactic acid-whole milk), III, 230. Anti-cough action of sedulon, III, 678.
Hotte, G. A. See Pappenheimer, A. M., jun.
Hotz, H. W., disturbances of water metabolism in patients with steatorrhea (endemic sprue), III, 675.
Hotz, O., action of intermittent ("flimmer") X-radiation on eggs of *Drosophila melanogaster*, III, 784.
Hotz, R. See Greene, C. H.
Hou, F. Y. See Ochiai, E.
Hon, H. C., thyroid enlargement following liver feeding in rats, III, 742.
and Yang, E. P., vitamin-B₁ metabolism. I. Urinary excretion by normal individuals and beriberi patients, III, 232.
Houchin, O. B., influence of anterior pituitary extracts on proteins of liver, III, 206.
and Turner, C. W., effect of season on blood-lipins, III, 287. Relation of anterior pituitary to bile production, III, 666.
See also Bergman, A. J.
Houck, R. C. See Sheppard, S. E.
Hough, H. B., and Wolff, H. G., relative vascularity of subcortical ganglia of cat's brain: putamen, globus pallidus, substantia nigra, red nucleus, and geniculate bodies, III, 484.
Hough, V. S. See Berman, A. L.
Houghtaling, H. B. See Gustafson, F. G.
Haupt, A. G. See Sherck, K. W.
Householder, A. S., mathematical theory of excitation, III, 20.
Houssay, B. A., Fasciolo, J. C., and Taquini, A. C., mechanism of renal hypertension, III, 386.
and Gerschman, R., action of sympathicolytic agents on plasma-potassium, III, 288.
Houston, D. F., m.p. of *p*-bromoanilides of solid aliphatic acids, II, 274.
Houston, J. See Henry, K. M.
Houston, W. V., acceleration of electrons in a crystal lattice, I, 139.

- Houstoun, R. A., dark bands in spectra of double diffraction gratings, I, 350.
- Hove, E., Elvehjem, C. A., and Hart, E. B., boron in animal nutrition, III, 231.
- Hovig, M. See Ziegler, E. R.
- Hovorka, F., Lankelma, H. P., and Axelrod, A. E., thermodynamic properties of the hexyl alcohols. III. β -Methylpentan- γ -ol and γ -methylpentan- γ -ol, I, 105.
- Lankelma, H. P., and Schneider, Isadore, thermodynamic properties of the hexyl alcohols. IV. γ -Methylpentan- α -ol and - δ -ol, I, 315.
- Lankelma, H. P., and Smith, W. R., thermodynamic properties of the hexyl alcohols. V. $\beta\beta$ -Dimethylbutan- α -ol and β -ethylbutan- α -ol, I, 435.
- How, T. G., and Lark-Horovitz, K., Geiger counter, I, 376.
- Howard, E., effects of castration on seminal vesicles as influenced by age, considered in relation to degree of development of adrenal X zone, III, 126. Effects of deoxycorticosterone and of testosterone on adrenal X zone, III, 728.
- and Gengradom, S., effects of ovariectomy and administration of progesterone on adrenal X-zone and uterus, III, 737.
- Howard, F. H., and McClintock, L., effect of iodoacetamide on growth of *Avena coleoptiles*, III, 617.
- Howard, F. L., preparation and physical properties of $\beta\beta\delta\delta$ -tetramethylpentane, II, 321.
- See also Brooks, D. B.
- Howard, J. E., and Vest, S. A., testosterone propionate in adult hypogonadism: implantation of testosterone, III, 308.
- See also Vest, S. A., Wilkins, L., and Winkenwerder, W. L.
- Howard, J. W., zircon, I, 421.
- Howard, P. J., and Tompkins, C. A., pectin-agar for diarrhoea in infants, III, 812.
- Howe, D. E. [with Mellon, M. G.], colorimetric determination of iron with salicylaldoxime, I, 394.
- Howe, D. H. See Pierce, H. B.
- Howe, H. A., and Bodian, D., production of immunity to poliomyelitis virus in motor cells of monkey's spinal cord, III, 113.
- See also Bodian, D.
- Howe, J. D. See Henderson, W. J.
- Howe, P. R., Elliott, M. D., and Shear, M. J., production of tumours by 3:4-benzpyrene in rats fed diets containing different levels of vitamin-A, III, 853.
- See also Boyle, P. E.
- Howell, C. E. See Guilbert, H. R.
- Howell, H. G., detection and estimation of molecules in the stars, I, 310.
- Howell, K. M., and Soskin, S., antibody response in rabbits to extracts of human pregnancy urine and of normal female urine, III, 495.
- Hoves, H. See Sheldon, J.
- Howes, W. E., sectional roentgenography of larynx, III, 493.
- Howie, J. W., and Cruickshank, J., bacterial spores as antigens, III, 540.
- Howland, A. L., specularite-alunite mineralisation at Hickey's Pond, Newfoundland, I, 180.
- Howlett, J., and Browne, J. S. L., water balance in alarm reaction [action of cortin and histamine], III, 419.
- Hoyle, F. See Lyttleton, R. A.
- Hoyle, L., complement fixation with Shope rabbit papilloma virus, III, 268. Lipoidal antigen produced by malignant tumours of mouse, III, 815.
- Hoyne, A. L., Wolf, A. A., and Prim, L., sulphanilamide in erysipelas, III, 331.
- Hoyt, A., and Warner, D., urea-treated virus as vaccine against rabies, III, 544.
- Hoyt, E. See Shelton, E. K.
- Hrdlička, A., mandibular and maxillary hyperostoses, III, 833.
- Hrynakowski, K., behaviour of azo-compounds and their derivatives in solid-liquid systems in relation to the structure of the azo-group, I, 215.
- and Adamanis, F., behaviour of the amino-group in solid-liquid systems with organic components, I, 215.
- Hsiao-Hui, C., inductive activity of fresh and heated organ (kidney and liver) on explanation in different presumptive areas of early gastrulae of *Triton alpestris*, III, 623.
- Hsieh, H. S. See Huang, T. C.
- Hsieh, W. See Chang, H.
- Hsing, C. Y., and Chang, K. J., cleavage of unsaturated fatty acids, II, 65.
- Hsu, C., and T'ung, T., bactericidal action of X-rays in presence of dyes, III, 444.
- Hsü, C. L., and Ma, W. C., direct and indirect effects of Roentgen radiation on the blood-forming organs of rats, III, 855.
- See also T'ung, T.
- Hsu, H. C. See Chu, H. I.
- Hsü, J., and Tang, P. S., sumac wax as embedding material in biological technique, III, 89.
- Hsu, P. C., and Adolph, W. H., Chinese celery cabbage as supplement to cereal diet. I. Growth, digestibility, roughage effect, biological value, and calcifying potency, III, 817. Nitrogen, calcium, and phosphorus balances of adolescent boys, III, 822.
- Hsu, P. T. See Gault, H.
- Hsü, Y. K. See Mo, W. W.
- Hu, C. K., and Frazier, C. N., masculinisation of adult female rabbit following injection of testosterone propionate, III, 645. Effect of ovary and urinary estrogens on growth of hair in rabbit, III, 736.
- Huang, C. H., acute agranulocytosis in kala-azar, III, 628.
- Huang, T. C., and Hsieh, H. S., kinetics of saponification of methyl acetate in dioxan-water mixtures at 25°, I, 121, 442.
- Huang-Minlon. See Inhoffen, H. H.
- Hubbard, J. C., and Herget, C. M., ultrasonic study of carbon dioxide near its critical point, I, 388.
- and Zartman, I. F., fixed path acoustic interferometer for the study of matter, I, 133.
- Hubbard, L. H. See Spies, T. D.
- Hubbard, M. E. See Detrick, L. E.
- Hubbard, M. J., and Rothschild, (Lord), spontaneous rhythmical impedance changes in the trout's egg, III, 217.
- Hubbard, R. S., and Anderson, R. K., free and combined sulphanilamide in material drained from human biliary tract, III, 918.
- and Beck, E. C., changes in glucose tolerance of obese subjects after weight reduction, III, 150.
- Hubbard, R. S. See also Lipp, W. F.
- Huber, F. See Stewart, W. H.
- Huber, H., familial constitutional factors in aplastic anaemia, III, 184.
- Huber, Hans, sodium polyphosphates, I, 124.
- Huber, H. H., purpura hæmorrhagica from sedormid, III, 7.
- Huber, K., anomalous mixed-crystal formation between alkali and lead halogenates, I, 204.
- Hubert, B., and Maton, J., parthenocarpism and growth-substances, III, 365.
- Hubert, C., and Leroux, M., action of sulphonamide on otogenic streptococcal brain abscess after operation, III, 491.
- Pertus, R., and Devernois, R., chemotherapy of hemolytic streptococcal septicemia, III, 520.
- Hubert, E. E., electric steriliser for the culture room, III, 274. Substituting pine sapwood for malt agar in culturing test fungi, III, 538.
- Huc, H. See Mousseron, M.
- Huchtemann, P. See Diltthey, W.
- Huddleson, I. F., and Pennell, R. B., preparation and purification of *Brucella* anti-serum, III, 452.
- See also Hamann, E. E.
- Huddleson, J. H., and McFarland, R. A., response of chronically fatigued neurotic patients to adrenal cortex therapy, III, 210.
- Huddleston, O. L., electrocardiographic changes in ethylene glycol poisoning, III, 98.
- Baldes, E. J., and Krusen, F. H., alterations of cardiac cycle and of polygrams produced by artificial fever, III, 99.
- Hudes, I. See Ferguson, W. F. C.
- Hudson, R. See Gagnon, P. E.
- Hudson, B. E., jun., and Hauser, C. R., condensations. VII. Acylation of ethyl isobutyrylisobutyrate; cyclisation of a $\beta\delta$ -diketo-ester by sodium triphenylmethyl. XIII. Alkylation of ethyl isobutyrate and other esters by means of sodium triphenylmethyl and alkyl halides, II, 65, 363.
- See also Hauser, C. J.
- Hudson, C. M., Herb, R. G., and Plain, G. J., excitation of the 455-ke.v. level of ^7Li by proton bombardment, I, 278.
- See also Plain, G. J.
- Hudson, C. S., relations between rotatory power and structure in the sugar group. XXXIV. Possibility of different conformations of the pyranoid ring, II, 7.
- See also Jackson, E. L., Maclay, W. D., Richtmyer, N. K., and Tilden, E. B.
- Hudson, L. See Kletzien, S. W.
- Hudson, R., determination of hæmolysis in stored plasma, III, 878.
- Hudspeth, E., and Dunlap, H., anomalous scattering of neutrons by helium and the d - d neutron spectrum, I, 307.
- See also Bennett, W. E., Bonner, T. W., and Richards, H. T.
- Hueber, E. F. von, action of magnesium glutamate in Graves' disease, III, 303.
- See also Brücke, F. T. von.
- Hübner, O., sooty lungs, III, 158.
- Hübschmann, H. See Riechert, W.
- Hüchel, W., hydrolysis and alcoholysis, II, 113. Substitution, addition, and elimination, II, 321.

- Hückel, W., and Bretschneider, H., reactions of unsaturated and polynuclear aromatic hydrocarbons with sodium and calcium in liquid ammonia, II, 270.
- and Pietrzok, H., Walden inversion. IV. Mode of reaction of phosphorus pentachloride. V. Walden inversion in the formation of ethers, II, 135, 228.
- and Schalscha-Ehrenfeld, M. von, association of the nitrotoluenes, II, 247.
- Schneider, Irmgard, and Doll, W., range of validity of the Arrhenius equation for reactions in solution, I, 166.
- Tappe, W., and Legutke, G., elimination reactions and their steric course, II, 227.
- Huelin, F. E., and Barker, J., effect of ethylene on respiration and carbohydrate metabolism of potatoes, III, 616.
- Hülka, J. H., testing of transmission apparatus with bone-conduction receiver, III, 205.
- Hüllstrung, H., and Schölzke, K. H., determination of salvarsan in cerebrospinal fluid in syphilis, especially after artificial fever treatment, III, 864.
- Hünemann, M. See Straaten, T.
- Hueper, W. C., and Landsberg, J. W., pathological changes in organs of rats produced by chronic nitrite poisoning, III, 682.
- Hüttenhain, E., use of sulphapyridine in pneumonia and meningitis, III, 521.
- Hüttig, G. F., intermediate states in phase transformations and catalytic influence of foreign gases on these, I, 366.
- and Kappel, H., kinetics of thermal decomposition of calcium carbonate, I, 392.
- and Kosterhon, K., active oxides. CXVII. Transformation of anatase into rutile and influence of gaseous hydrogen chloride on it, I, 136.
- and Markus, G., active oxides. CXVI. Transformation of γ -aluminium oxide into α -aluminium oxide and influence of foreign gases on it, I, 126.
- Huey, C. S., and Tartar, H. V., partial vapour pressures of water and ammonia from the system water-phosphoric acid-ammonia, I, 117.
- Huff, C. G., immunity in invertebrates, III, 269.
- Huffer, C. M. See Stebbins, J.
- Huffman, C. F. See Duncan, C. W.
- Huffman, E. W. D., determination of sulphur in organic compounds, II, 145.
- Huffman, M. N., MacCorquodale, D. W., Thayer, S. A., Doisy, E. A., Smith, G. Van S., and Smith, O. W., α -dihydrothecin [α -estrone] from human pregnancy urine, II, 344.
- Thayer, S. A., and Doisy, E. A., α -dihydrothecin from human placenta, III, 582.
- Huffmann, H. M., thermal data. XII. Heats of combustion of carbamide and guanidine carbonate and their standard free energies of formation, I, 323.
- Ellis, E. L., and Borsook, H., thermal data. XI. Heat capacities and entropies of guanidine carbonate, glutamic acid hydrochloride, ornithine dihydrochloride, and *d*- and *l*-lactic acids, I, 201.
- Huffmann, J. W., and Bos, L. H., action of testosterone propionate on female genital tract, III, 644.
- Hug, E., brachycephaly in Europe, III, 554. Elimination of sulphanilamide by saliva, pancreatic juice, and prostatic secretion, III, 598.
- See also Deulofeu, V.
- Hugel, G., and Clairbois, L., absolute system of viscosity and viscosity index, I, 65.
- Huggins, C., McFayden, J., and Wiege, E., quantitative study of neutral fat, solids, and water in bone marrow of normal and anæmic limbs and effect of centrifugation on marrow, III, 702.
- Masina, M. H., Eichelberger, L., and Wharton, J. D., quantitative studies of prostatic secretion, III, 308.
- Huggins, M. L., properties of long-chain compounds as functions of chain length, I, 64. Entropy of long-chain compounds in the gaseous state, I, 201. Viscosity of dilute solutions of long-chain molecules. III. Staudinger viscosity law, I, 254. Structure and properties of glasses containing boron, I, 403. Hydrogen bridge models for globular proteins, I, 404. Silicate glasses, I, 407.
- Hughes, D. See Jones, H.
- Hughes, D. J., positive excess and electron component in the cosmic-ray spectrum, I, 279.
- Hughes, E. D., Ingold, C. K., Masterman, S., and McNulty, B. J., mechanism of elimination reactions. V. Kinetics of olefine elimination from ethyl, isopropyl, *tert*-butyl, and α - and β -phenylethyl bromides in acidic and in alkaline alcoholic solution; effects due to, and factors influencing, the two mechanisms of elimination, I, 390.
- Ingold, C. K., and Taher, N. A., mechanism of substitution at a saturated carbon atom. XVII. Polar effects in alkyl groups as illustrated by solvolytic substitutions of *p*-alkylbenzhydryl chlorides, I, 391.
- and Taher, N. A., mechanism of substitution at a saturated carbon atom. XVIII. Polar effect of the carboxylate ion group as illustrated by the hydrolysis of the bromomalonate and α -bromomethylmalonate ions, I, 391.
- See also Bateman, L. C., and Church, M. G.
- Hughes, E. E., and Acree, S. F., reaction of bromine with furfuraldehyde and related compounds, II, 229.
- Hughes, E. H., rôle of riboflavin and other factors of vitamin-B complex in nutrition of pigs, III, 51.
- and Cameron, H. S., hog cholera immunisation in pigs on low vitamin-B-complex intake, III, 78.
- Hughes, E. K., [results in pregnant women] treated with wheat-germ oil capsules, III, 849.
- Hughes, E. W., crystal structure of dicyanodiamide, I, 312.
- Hughes, J., McCouch, G. P., and Stewart, W. B., cord potentials in spinal shock: single volleys, multiple stimuli, and crossed effects in monkey, *Macaca mulatta*, III, 569.
- See also Appel, J. W., Appel, K. E., and Lansbury, J.
- Hughes, J. G., Vollmer tuberculin patch test: evaluation of its relative sensitivity, III, 528.
- Hughes, J. R. See Chandler, S. B.
- Hughes, J. W., binaural localisation with two notes differing in phase by 180 deg., III, 118. Monaural threshold: effect of subliminal and audible contralateral and ipsilateral stimuli, III, 400. Upper frequency limit for binaural localisation of a pure tone by phase differences, III, 492.
- Hughes, R. P., use of sulphanilamide in dermatology, III, 861.
- Hughes, T. P. E. See Davies, D. R.
- Hughes, W. See Beevers, C. A.
- Hughes, W. F. G. See Greville, G. D.
- Hughson, W., and Thompson, E., research in audition: the next steps, III, 26.
- and Witting, E. G., estimation of improvement in hearing following therapy of deafness, III, 723.
- See also Witting, E. G.
- Hugill, J. A. C., Coop, I. E., and Sutton, L. E., electron diffraction and electric dipole moment investigations of derivatives of ethylene, I, 63.
- Hugonet, J. See Seaman, W.
- Huhn, O., determination of thiochrome, III, 144.
- Hui, F. A., sulphanilamide therapy of lung abscess, III, 60.
- Huin, O. C. See Dobry, (Mme.) A.
- Huizinga, E., classification of labyrinthine reflexes, III, 400. Rolling movements in pigeon [after labyrinthectomy], III, 576.
- Hull, E. See Monte, L. A.
- Hulpieu, H. R., Kitchel, J. H., and Weatherby, J. H., comparative study of twenty-five alkylthiobenzoates with respect to surface anaesthesia, toxicity, and systemic effects, III, 525.
- Hultborn, K. A., allergic reactions after injections of opaque substances in urography, III, 503.
- Hultgren, R. See Chiswick, H. H.
- Hultén, E. See Grabe, B.
- Hultquist, M. E., and Northey, E. H., interaction of di- β -chloroethyl ether with ethylenediamine, II, 150.
- See also Crossley, M. L.
- Hulubei, H., element 87 (Ml), I, 50.
- and Cauchois, (Mlle.) Y., presence of element 85 among disintegration products of radon, I, 307.
- Hume, D. N. See Stone, H. W.
- Hume, E. M., Burbank, R., and Korenchevsky, V., effects of administration of oestrogens on organs of castrated and non-castrated male rats partly deprived of vitamin-A, III, 130.
- Nunn, L. C. A., Maclean, I. S., and Smith, H. H., fat-deficiency disease of rats; relative curative potencies of methyl linoleate and arachidonate; action of methyl esters of fatty acids of cod-liver oil, III, 672.
- Hume-Rothery, W., liquid state of the elements, I, 352.
- and Raynor, G. V., equilibrium and lattice-spacing relations in the system magnesium-cadmium, I, 206.
- Raynor, G. V., Reynolds, P. W., and Packer, H. K., constitution and structure of alloys of intermediate composition in the systems copper-indium, copper-aluminium, copper-germanium, silver-aluminium, and silver-germanium, I, 407.
- Reynolds, P. W., and Raynor, G. V., factors affecting the formation of 3/2 electron compounds in alloys of copper, silver, and gold, I, 407.

- Hummel, F. C. See Beach, E. F., Macy, I. G., Shepherd, M. L., and Souders, H. J.
- Hummel, H. G., newer amoebicides and results of treatment of amoebiasis with di-iodohydroxyquinoline (diodoquin), III, 152.
- Hummell, K. P. See Snell, G. D.
- Humoller, F. L., Kuman, S. J., and Snyder, F. H., reduction products of *d*-glucoheptulose, II, 68.
- Humperdinck, K., studies on operatives of printing machines with spraying apparatus, III, 445.
- Humphrey, J. H., and Yuill, M. E., synthetic immunochemistry. IV. Further investigation of *O*- β -glucosidotyrosyl derivatives of proteins, III, 79.
- Humphreys, C. J., effect of pressure on wave-lengths of international secondary standards in first spectrum of iron, I, 305.
- Meggors, W. F., and De Bruin, T. L., Zeeman effect in second and third spectra of xenon, I, 137.
- Humphreys, E. See Brunschwig, A.
- Humphreys, H. F., teeth from case of hypoparathyroidism, III, 123.
- Humphreys, R. F., separation of bromine isotopes by centrifugation, I, 36.
- Humphreys, S. See Chao, Y., and Penfield, W.
- Hund, F., and Mrowka, B., electron states in a crystal lattice. I. Diamond. II. Energy bands in simple lattices, I, 427.
- Hund, P., chemical force as the effect of matter field, I, 99.
- Hungate, R. E., nutrition of *Zootermopsis*. III. Anaerobic carbohydrate dissimilation by the intestinal protozoa, III, 351.
- Hungerland, H., empirical formula for characterisation of relations between various urine compounds, III, 503.
- Hypoglycæmic convulsions in children, III, 883.
- Hunscher, H. A. See Macy, I. G., Shepherd, M. L., and Souders, H. J.
- Hunsmann, W. See Eucken, A.
- Hunt, A. B. See Madding, G. F.
- Hunt, H. F., See Plank, C. J., and White, P.
- Hunt, H. F., Patterson, W. B., and Nicodemus, R. E., placental infarction and eclampsia, III, 662.
- See also Foss, H. L.
- Hunt, M. See Adams, R.
- Hunter, A. See Gornall, A. G.
- Hunter, A. C. See Welch, H.
- Hunter, D., Bomford, R. R., and Russell, D. S., poisoning by mercury methyl compounds, III, 927.
- Hunter, E. C. E., and Turner, A. J., iso-electric point of gelatin, I, 358.
- Hunter, F. R., effect of hypertonic and hypotonic solutions on respiration of chicken erythrocytes, III, 184.
- and Parkigian, V., effect of temperature on cell permeability and respiration [of erythrocytes], III, 703.
- Stringer, L. D., and Weiss, H. D., heparin as anti-coagulant for permeability studies, III, 790. Partial retention of hæmoglobin by chicken erythrocytes, III, 838.
- Hunter, F. T., chronic exposure to benzene. II. Clinical effects, III, 68.
- Hunter, G. J. E., variation within pure cultures of *Streptococcus cremoris*, III, 356.
- Hunter, G. J. E., and Whitehead, H. R., action of chemical disinfectants on bacteriophages for the lactic streptococci, III, 937.
- See also Whitehead, H. R.
- Hunter, J. B., surgery in diabetic patients, III, 327.
- Hunter, J. H. See Klemme, C. J., and Koloff, H. G.
- Hunter, J. T., surgery in diabetic patients, III, 327.
- Hunter, L., and Marriott, J. A., associating effect of the hydrogen atom. V. Nitroarylhydrazones, II, 131.
- See also Elkins, (Miss) M., and Hayes, H. T.
- Hunter, T. G. See Brancker, A. V.
- Hunter, W. S., kinæsthetically controlled maze habit in rat, III, 637.
- Huntington, H. E., shear constants of hexagonal crystals, I, 102.
- Huntington, J. See Schachter, R. J.
- Huntoon, R. D., Ellett, A., Bayley, D. S., and Van Allen, J. A., distribution in angle of protons from the deuteron-deuteron reaction, I, 383.
- See also Myers, F. E.
- Huntress, E. H., and Carten, F. H., identification of organic compounds. I. Chlorosulphonic acid as a reagent for identification of aryl halides. III. Chlorosulphonic acid as a reagent for characterisation of aromatic ethers, II, 160, 242.
- Hunziker, F. See Miescher, K.
- Hurd, C. B., and Paton, H. W., silicic acid gels. IX. Effect of change of pH on time of set of acid gels, I, 161.
- Hurd, C. D., and Abernethy, J. L., chlorination and structure of acetylketen, II, 267.
- and Glass, H. G., pyrolysis of diglycollic anhydride, II, 65.
- Greengard, H., and Roe, A. S., preparation and pyrolysis of cyclohexanone, II, 93.
- and Hoffman, W. A., directed ring-closure in synthesis of chromans and coumarans from *o*-allylphenols, II, 186.
- and Kelso, C. D., acetoacetyl chloride, II, 297. β -Diketones; synthesis, structure, and bactericidal properties, II, 364.
- and Roe, A. S., keten and its dimeride, II, 66.
- See also Williams, Jonathan W.
- Hurd, F. W. See Spink, W. W.
- Hurd-Karrer, A. M., γ_H of leaf juice in relation to environment and plant species, III, 457.
- Hurlburt, E. H. See Green, J. B.
- Hurlbut, C. S., jun., [with Griggs, D. T.], igneous rocks of the Highwood Mountains, Montana. I. Laccoliths, I, 45.
- Hursh, J. B., conduction velocity and diameter of nerve fibres, III, 109.
- Properties of growing nerve fibres, III, 109.
- Relayed impulses in ascending branches of dorsal root fibres, III, 569.
- Hurst, A., functional deafness, III, 723.
- See also Briggs, P. J., and Brugsch, T.
- Hurst, C. See Allen, W. D.
- Hurst, D. G., Latham, R., and Lewis, W. B., production of radium-*E* and polonium by deuteron bombardment of bismuth, I, 141.
- Hurst, E. W., Cooke, B., and McLennan, G. C., survival and growth of human and rabbit tissues (normal and neoplastic) on chorioallantois of chick and duck embryo, III, 4.
- Hurst, H., permeability of insect cuticle, III, 531.
- Hurst, S. V. G., histamine iontophoresis for varicose ulcer, III, 680.
- Huru, M. See Berkson, J.
- Hurwitz, C., and Wilson, P. W., determination of biological nitrogen fixation: a gasometric method, III, 369.
- Hurwitz, H., jun., interaction energies in radiation theory, I, 428.
- Hurxthal, L. M. See Perkin, H. J.
- Huse, G., and Powell, H. M., crystal structure of picryl iodide, I, 432.
- Husemann, E., constitution of polyoses of wood, II, 69.
- See also Schulz, G. V.
- Hussey, R. See Roessler, H.
- Hustin, A. See Gillard, G.
- Hnstrulid, A. See Mann, M. M.
- Hutchens, J. O., Krah, M. E., and Clowes, G. H. A., physiological effects of nitro- and halogen-substituted phenols on *Arbacia* eggs in presence of ammonia, III, 465.
- Hutchinson, G. E., and Wollack, A., Connecticut lake sediments. II. Chemical analyses of a core from Linsley Pond, North Branford, I, 378.
- Hutchinson, J. C. D. See Deighton, T.
- Hutchinson, R. C., nutritive value of powdered whole milk, III, 913.
- Hutchison, A. C., and Reade, T. H., action of sodium nitrite on Michler's hydrol in hydrochloric acid, II, 83.
- Hutchison, C. A., Stewart, D. W., and Urey, H. C., concentration of ^{13}C , I, 369.
- Hutchison, F. S. T., and Herman, M., [treatment of] pneumococcal meningitis, III, 243.
- Hutchison, I. W. See Litkenhous, E. E.
- Hutt, F. B. See Bruckner, J. H., and Lamoreux, W. F.
- Hutton, C. O., titaniferous iron sands of Patea [S. Taranaki], with an account of heavy residues in underlying sedimentary series, I, 379.
- Hutton, J. H., Case, J. T., Culpepper, W. L., Olson, E. C., and Madden, E. H., endocrine aspect of essential hypertension and diabetes mellitus, III, 386.
- Huxford, W. S. See Engstrom, R. W.
- Huxley, A. F. See Hodgkin, A. L.
- Huxley, J. See Fisher, R. A.
- Huxley, J. S., Webb, C. S., and Best, A. T., temporary poikilothermy in birds, III, 224.
- Huzimato, K., and Ueno, Y., how far sensory function participates in operations; influence of sounds on visual acuity; influence on working efficiency of the presence and absence of typing sounds in the transmission of messages; changes in working movements and attitude, 575.
- Huzino, T., endoepithelial glands of prostate, III, 648.
- Huzita, M. See Tazaki, H.
- Huziwar, S. See Asano, M.
- Hwang, J. M. S., and Krumbhaar, E. B., amount of lymphoid tissue of human appendix and its weight at different age periods, III, 310.
- Hwang, Y., determination of bacterial content of soils, III, 451.
- and Pearse, H. L., response of seeds and seedlings to indolylacetic acid, III, 365.
- Hyde, E., glycine and histidine feeding and creatine, creatinine, and inorganic phosphorus excretion in man, III, 753.

- Hyde, R. R., infectious myxomatosis of rabbits (Sanarelli) versus fibroma virus (Shope) with reference to time interval in establishment of concomitant immunity, III, 45. Hydrocephalus in experimental rabbits, III, 395.
- and Gardner, R. E., transmission experiments with fibroma (Shope) and myxoma (Sanarelli) viruses, III, 45. See also Parsons, E. I.
- Hyland, H. H., Goodwin, J. E., and Hall, G. E., clinical applications of electroencephalography, III, 200.
- Hyman, C. See Ponder, E.
- Hyman, H. T. See Waring, C. E.
- Hyman, H. T., Chargin, L., Rice, J. L., and Leifer, W., intravenous drip chemotherapy of syphilis, III, 65. See also Baehr, G.
- Hyman, M. See Soskin, S.
- Hyndman, O. R., central visual system; evidence against bilateral representation through splenium of corpus callosum, III, 21. Migraine caused by demonstrable pathologic conditions, III, 637.
- and Jarvis, F. J., gastric crisis of tabes dorsalis [treated by thoracic chordotomy], III, 636.
- and Van Epps, C., possibility of differential section of spinothalamic tract, III, 570. Tumour of thalamus, a ventriculographic entity, III, 637.
- Wolkin, J., and Paul, W. D., effect of anterior chordotomy on essential hypertension, III, 711. See also Van Epps, E. F.
- Hynes, M., dosage of sulphonamides in children, III, 520. Aleukemic leukemia, III, 556.
- Hysel, V. B. See Rollason, E. C.
- I.
- Iacapraro, G., sulphamide therapy in gonorrhoea, III, 521.
- Iagnov, A., action of theophylline-dichloraniline, III, 526.
- Iancu, I. See Zamfir, D.
- Iandelli, A. See Mazza, L.
- Iball, J., oxidation-reduction potentials of quinones derived from carcinogenic hydrocarbons, III, 505.
- Ibbs, T. L. See Bastick, R. E.
- Ibeling, H. See Wiele, G.
- Ibing, G., physico-chemical determination of components in mixtures, II, 318.
- Iddles, H. A., French, K. S., and Mellon, E. F., synthesis of *aaa*-triphenyl- β -o-anisylethane, II, 12.
- Miller, W. H., and Powers, W. H., rearrangement of the triphenylmethyl ethers of *o*-cresol and brominated *o*-cresols, II, 78.
- Ide, A. G., Baker, N. H., and Warren, S. L., vascularisation of Brown-Pearce rabbit epithelioma transplant as seen in transparent ear chamber, III, 507.
- Harvey, R. A., and Warren, S. L., rôle of trauma in dissemination of tumour fragments by circulation, III, 228.
- Ide, W. S., and Buck, J. S., 3-methyl-3:4-di- and 1:2:3:4-tetra-hydroisoquinolines, II, 189.
- Igamberdiev, I. See Pleskov, V. A.
- Igarasi, Y., fibre-tracts from antero-lateral part of cerebral cortex of goat, III, 484.
- Iggema, M. L., effect of light on growth of blue and green algae, III, 173.
- Iglauer, A., and Altschule, M. D., pressor action of benzedrine and parendrine, III, 442. Effect of parendrine on venous system, III, 566. See also Altschule, M. D.
- Ignatiuk-Maistrenko, V. A. See Bezzubetz, M. K., and Drozdov, N. S.
- Igolen, G. See Simonet, M.
- Igritzkaja, E. B. See Minina, E. G.
- Iimori, T. See Amaki, T.
- Iitaka, I., and Yamaguchi, S., electron diffraction examination of oxide films on light metals, I, 101.
- Ikawa, M. See Nishina, Y., and Sagane, R.
- Ikeda, H. See Nakanishi, S.
- Ikegami, Y., function of testis and stomach movement, III, 34.
- Ikin, E. W. See Taylor, G. L.
- Ilfeld, F. W. See Shear, M. J.
- Ilian, B. See Kapp, H.
- Ilesco, C. See Solacolu, T.
- Iljenko, P. I. See Golovati, R. N.
- Iljin, B. V., and Kiselev, A. V., heats of wetting at various temperatures and wetting affinity, I, 218.
- Illari, G., constitution of nitrosopyrrole-black. II, II, 57. Determination of salicylic acid by ferric chloride, II, 60. Ferri-salicylic complexes, II, 220.
- and Zucchetti, M., analysis of sulphurated water of Carobbio (Parma), I, 84.
- Illényi, A., aerobic growth of anaerobic teeth bacteria, III, 355.
- and Büsing, K. H., new culture methods for anaerobes using *l*-ascorbic acid and other reducing substances, III, 354.
- Illing, T., panmyelophthisis in children, III, 8.
- Illner, K. W. See Kröger, C.
- Iluridze-Moltschan, K. M. See Makarevskaja, E. A.
- Imaizumi, R., and Hano, K., pharmacological action of anthranilic acid, III, 922.
- Imamura, G., embryonic chemistry of sea-turtle, III, 34. Physical properties of amniotic and allantoic fluids of sea-turtle embryo, III, 34. Composition of amniotic and allantoic fluids of sea-turtle embryo, III, 911.
- Imamura, H., chemistry of snakes. I. Nitrogenous extractives of snake muscle. II. Lipins. III. Enzymes of organs. IV. Bile acids. V. Inorganic constituents of muscle, III, 814.
- Imholz, A. See Vannotti, A.
- Immediata, T., and Day, A. R., β -naphthyl derivatives of ethanalamine and *N*-substituted ethanalamines, II, 374.
- Immelman, M. N. S. See Voss, V.
- Imms, A. D., dipterous larvae and wound treatment, III, 61. "Safe" fluid for museum use, III, 89.
- Imre, L., radioactive methods of determining ion adsorption at crystal surfaces. II, I, 291. Physico-chemical separation of isomeric atoms, I, 369.
- Ina, M. See Fujikawa, F.
- Inaba, A. See Shinohara, K.
- Inagaki, T. See Sakurai, Y.
- Inay, M., Ruch, T. C., Finan, S., and Fulton, J. F., endocrine weights of primates, III, 724.
- Ince, J. G. H. See Young, M.
- Inckel, M. See Diltthey, W.
- Inda, C., effect of anticoagulating substances on blood-glycolysis, III, 558. Washing of corpuscles in determination of blood-chloride, III, 559.
- Inden, T., megakaryocytes in sternal puncture smears, III, 877.
- Indovina, R., surface tension of deuterium oxide and of its mixtures with water, I, 209. Conductance of electrolytes in heavy water, I, 219. Effect of animal charcoal on ascorbic acid, III, 595.
- and Salemi, B., reaction between ascorbic acid and mercuric chloride in heavy water, I, 223.
- Infantellina, F. See Cioglia, L., and Zummo, C.
- Inge, L. See Walther, A.
- Ingelstam, E., luminous X-ray spectrograph of high resolving power, I, 330.
- Ingersoll, L. R., Rudnick, P., Slack, F. G., and Underwood, N., optical activity, circular dichroism, and absorption of crystalline nickel sulphate, I, 350.
- Ingiulla, W., effect of cardiac drugs on mother and foetus, III, 62. See also Donatelli, L.
- Ingle, D. J., work capacity of rat immediately following partial adrenalectomy, III, 411. Work performance of adrenalectomised rats treated with corticosterone and chemically related compounds, III, 411. Effect of two steroid compounds on weight of thymus of adrenalectomised rats, III, 724. Diabetogenic effect of some cortin-like compounds, III, 727. Work performance of adrenalectomised rats maintained on high-sodium chloride, low-potassium diet, III, 806. Effect of two cortin-like compounds on body-weight and work performance of adrenalectomised rats, III, 846. Effect of three synthetic steroid compounds on weight and work performance of adrenalectomised rats, III, 846.
- and Corwin, W. C., coagulation time of blood in normal and adrenal-demedullated rats, III, 92. See also Griffith, J. Q., jun.
- Ingleby, P. See Jánosy, L.
- Inglis, D. R., spin-orbit coupling in the α -model of light nuclei, I, 92. Heavy particle interactions, I, 342. Nuclear spin of ^{13}C , I, 425.
- and Teller, E., ionic depression of series limits in one-electron spectra, I, 87.
- Ingold, C. K. See Bateman, L. C., Church, M. G., and Hughes, E. D.
- Ingraham, E. S., jun. See Wartman, W. B.
- Ingraham, J. N. See Norris, J. F.
- Ingraham, N. R., jun. See Stokes, J. H.
- Ingram, M., effect of sodium chloride and temperature on endogenous respiration of *B. cereus*, III, 826.
- Ingram, W. R., Ladd, L., and Benbow, J. T., excretion of antidiuretic substance and its relation to hypothalamic-hypophyseal system in cats, III, 406.
- and Winter, C. A., blood-sugar in cats with diabetes insipidus, III, 122. See also Winter, C. A.
- Inhoffen, H. H., and Huang-Minlon, transformations of brominated derivatives of cholesterol. VI. Constitution of $\Delta^{1:2-4:3}$ -cholestadien-3-one, II, 94.
- Inman, O. L., chlorophylls and photosynthesis of algae from Yellowstone National Park, California, and Nevada, III, 830.
- and Crowell, M. L., condition of chlorophyll in leaves, III, 547.
- Innes, J. R. M., nervous affections in man and animals, III, 569.
- Russell, D. S., and Wilsdon, A. J., familial cerebellar hypoplasia and degeneration in Hereford calves, III, 637.

- Innes, J. R. M., and Whittick, J. W., thrombo-angiitis obliterans in horse, III, 476.
See also Phillipson, A. T.
- Inoue, K., and Akô, T., flavin *versus* nicotine, III, 818.
and Shinagawa, A., effect of vitamin-B₂ complex on albino rats fed on diets containing nicotine, III, 819.
- Inoue, M., histological changes of peripheral vascular system in experimental lesions of the aortic valves, III, 100.
- Inoue, S. See Fujikawa, F., and Sawai, I.
- Inoue, Y., and Yukawa, H., separation and identification of fatty acids, II, 336.
- Intonti, R., and Milazzo, G., projection comparator of spectra, I, 132.
- Inui, S., and Morikawa, H., case of myasthenia gravis improved after administration of thyroid and adrenal extract, III, 109.
- Inukai, F. See Nakahara, W.
- Ioanid, V. See Nitescu, I. I.
- Iob, V., and Swanson, W. W., sulphur metabolism of early infancy, III, 151.
See also Swanson, W. W.
- Ionescu, N. See Gavrillesco, N.
- Ionescu, A., high-dispersion spectrograph for the ultra-violet, I, 420.
- Ionescu, C. N., Stanciu, N., and Rădulescu, V., p_H optimum of fumarase, III, 260.
- Ionescu, M. See Tanasescu, L.
- Ionescu, T. V., radius of the electron and calculation of photo-electric constant of metals, I, 139. Corpuscular theory of electrical conductivity of metals, I, 244. Structure of the negative ion; determination of the nuclear magnetic moment, I, 309.
- Iordache, N. See Longinescu, G. G.
- Ipatiev, V. N., mixed catalysts, I, 366.
- and Corson, B. B., hydrogenation of acetophenone to cyclohexylmethylcarbinol in presence of solvent, II, 81.
- Corson, B. B., and Kurbatov, J. D., mixed copper-chromium oxide hydrogenation catalysts, I, 327.
- and Pines, H., interaction of benzene with methylcyclobutene and methylenecyclobutane in presence of sulphuric acid, II, 73.
- Pines, H., and Schmerling, L., isomerisation accompanying alkylation. II. Alkylation of benzene with olefines, naphthenes, alcohols, and alkyl halides, II, 247.
- and Schaad, R. E., destructive hydrogenation of high mol. wt. polymerides; isobutene polymeride, butadiene polymeride, and natural rubber, II, 265.
See also Schaad, R. E., and Schmerling, L.
- Irai, I. See Ochiai, E.
- Ireland, E. J. See McLean, R. S.
- Ireland, J. C., seasonal sugar variations in lucerne, III, 546.
- Ireland, J. T. See Harris, I.
- Iri, S., mechanism of hexokinase action, III, 686.
- Irish, D. D. See Adams, E. M.
- Irish, O. J. See Du Vigneaud, V.
- Irlé, S., blood tests in faeces, III, 220. Action of "nativinsulin," III, 411.
- Irons, J. V., Bohls, S. W., DeShazo, T., and Hewlett, L. L., MacConkey's and deoxycholate citrate agars for isolation of dysentery bacilli, III, 75.
- Irons, R., neurological complications of pregnancy, III, 20.
- Irrera, L., action of Raney nickel on azoimide, I, 171.
- Irvin, J. L., Merker, H., Anderson, C. E., and Johnston, C. G., desiccated and normal pig's gall-bladder bile, III, 137.
See also Johnston, C. G.
- Irvine, R., and Stimson, R. L., method of ultra-close-up photography in ophthalmology, III, 395.
- Irvine, V. C., X-radiation and growth substances as affecting plant primordial tissues, III, 776.
- Irving, G. W., jun., and Du Vigneaud, V., simple laboratory method for obtaining preparations containing pressor and oxytocic activity from the posterior lobe of the pituitary gland, III, 901.
and Loring, T. W., laboratory juice extractor, III, 945.
See also Fruton, J. S.
- Irving, H., interaction of arylhydrazines with halogenated aldehydes, II, 275.
- Irving, J. T., and Richards, M. B., influence of age on requirement of vitamin-A, III, 231. Influence of graded doses of vitamin-A on pathological changes in central nervous system of rats with suggestions for a prophylactic assay of the vitamin, III, 427.
- Irving, L., and Grinnell, S. W., secretion of oxygen at high pressure from blood of fish, III, 195.
See also Root, R. W., and Scott, W. J.
- Irwin, F. See Sandin, R. B.
- Irwin, J. O., determination of riboflavin. III. Statistical analysis of data, III, 513.
See also Fieller, E. C.
- Irwin, M. R. See Cumley, R. W.
- Irwin, W. B. See Smith, L. I.
- Isaacs, B. See Elliott, M. C.
- Isaacs, B. L. See Ivy, A. C.
- Isaacs, M. L., determination of disinfection rates, III, 933.
- Isaacs, R., Sturgis, C. C., Bethell, F. H., and Goldhamer, S. M., blood, III, 702, 837.
See also Lin, H. A. C.
- Isaak, L., sclerosis solutions, III, 793.
- Isaji, M., adenomata and carcinomata of islets of Langerhans, III, 498.
- Isaka, H. See Miyazi, S.
- Isakova, A. A., selection of specific microflora from the soil's microbic complex of roots of plants, III, 353.
- Isard, H. J. See Baer, S.
- Isbell, H. See Fraser, H. F.
- Isbell, H. S., and Frush, H. L., α - and β -methyl lyxosides, mannosides, gulosides, and heptosides of like configuration, II, 204.
- Pigman, W. W., and Frush, H. L., reducing powers of various sugars with alkaline copper citrate reagent, II, 204.
See also Helferich, B.
- Isemura, T., oiliness of liquids. IX. Static friction coefficients of cyclic compounds for glass surfaces, I, 438.
- Isenhour, C. E. See Dill, L. V.
- Ishaq, M., λ 3105, λ 3338, and λ 3375 bands of OD, I, 400.
and Pearce, R. W. B., λ 3400 bands of PH and PD, I, 55.
- Isherwood, F. See Haworth, W. N.
- Ishibashi, H., purgative effect of boric acid, III, 924.
- Ishida, Y., and Hiyama, S., stark effect of Hg I, I, 50. Stark effect of anomalous lines of mercury spectrum, I, 335.
- Tamura, T., and Fukushima, M., Stark effect of C I, I, 49.
- Ishidate, M., and Kawahata, H., autoxidation of *trans*- π -aldehydocamphor; influence of other ketocamphors, II, 136.
and Shishido, F., peroxidase action of π -aldehydocamphor, II, 136.
- Ishiguro, T., and Watanabe, M., constituents of ambergris. I, III, 44.
- Ishihara, Y. See Noda, T.
- Ishii, C., Asano, Y., Sekido, Y., and Simamura, H., intensity-variations of cosmic ray, I, 188.
- Ishii, M., and Oshima, Y., nature of tannin of *Acacia confusa*, Merrill. I. Tannin and catechin, III, 778.
- Ishikawa, F., and Aoki, I., dissociation constants of arsenious acid and hydroxylamine, I, 321.
- Ishikawa, S., and Sakurai, T., aldehydic perfumes. III. Synthesis of β -hydroxynonaldehyde. IV. Synthesis of α -vanillylidene- and α -salicylidene-n-heptaldehyde, II, 204, 222.
- Tosimitu, T., Miyata, A., Araki, J., and Someno, R., mechanism of pyrolysis of castor oil, II, 203.
- Ishikawa, T., effect of high atmospheric pressure on intermediary carbohydrate metabolism and serum-protein, III, 478.
- Ishimaru, K. See Naito, H.
- Ismail, A. F. A. See Schönberg, A.
- Ismailski, V. A., electronic formulae of double and triple linkings, I, 11.
- Iso, M., abnormalities of human dura mater, III, 85.
- Isobe, T. See Tominaga, H.
- Isono, S., is amount of vitamin-C in Arakawa-positive milk sufficient for a growing infant? III, 515.
- Israëls, M. C. G., culture *in vitro* of leucocytes from human bone marrow, III, 183. Nature of human leukaemia: evidence from culture of bone marrow cells *in vitro*, III, 879.
and Wilkinson, J. F., aetiology and prognosis of achrestic anaemia, III, 557.
- Istrati, G., Kicksch, L., and Prigge, R., active tetanus immunity. II. Relationship between antigen stimulus and antitoxin formation. III. Measurement of activity of tetanus antitoxins, III, 772.
- Isttschenko, J., and Lebedeva, M., administration of antireticular serum in general and local surgical infection, III, 881.
- Itikawa, I., experiments on hypophyseal anterior lobe hormone, III, 899.
- Itikawa, Z. See Tsuda, K.
- Itina, N. A. See Ginezninski, A. G.
- Itô, A., structure of liver cells in experimental icterus, III, 851.
- Ito, G., and Kitamura, K., cerebral action currents in various mammals, III, 485.
- Ito, K., roentgenological study of arterial supply in normal and diseased uterus, III, 906.
- Ito, K. See Yamamoto, R.
- Itô, R., properties of streptolysin, III, 688.
- Itô, Ryoji, and Kayashima, S., lipase. VII. Determination of tissue-esterase activity by titration with alkali, III, 685.
- Kayashima, S., and Fujimi, K., lipase. VI. Effects of reduction and oxidation of serum-lipase and milk-esterase, III, 685.
and Obo, F., effect of reduction and oxidation on yeast-invertase activity, III, 686.

- Ito, S., tumour development and internal secretions. I. Hepatomas and ovariectomy. II. Hepatoma production and prolactin, III, 316, 505. Occurrence of leukaemia in rats, III, 669.
See also Sata, N.
- Ito, T. See Nagai, J.
- Ito, Y. See Ochiai, E.
- Itoh. See under Ito.
- Itterbeek, A. van, installation for liquid helium in the Physics Laboratory at Louvain, I, 175. Surface tension of liquid deuterium, I, 245.
and Dingenen, W. van, desorption, I, 208.
- Dingenen, W. van, and Borghs, J., adsorption of helium gas on charcoal between 4·22° K. and 1·78° K., I, 21.
- and Mariens, P., absorption of sound in oxygen gas and in carbon dioxide gas containing small quantities of H_2O , D_2O , and Ne; relaxation times for the vibrational energy, I, 153.
- and Paemel, O. van, viscosity of liquid deuterium, I, 203. Viscosity of neon, hydrogen, deuterium, and helium as a function of temperature between room temperature and liquid hydrogen temperatures, I, 203. Viscosity of gases for low pressures at room temperature and at low temperatures, I, 248.
See also Borghs, J.
- Itzerott, D., action of growth-promoting substances of young maize plants on growth of *Ustilago zeae*, III, 450.
- Iurace, A., influence of iron on acidity variations of nutrient solution of *Aspergillus niger*, III, 262.
- Ivane, I. F., electrolysis of aqueous sulphurous acid, I, 325.
- Ivanenko, D., and Sokolov, A., generalised wave equation and classical mesodynamics, I, 280.
- Ivanov, B. V. See Beliankin, D. S.
- Ivanov, D., alkaline decomposition of substituted aliphatic β -hydroxy-acids. [IV.] α -Alkyl-acids, II, 171.
- Ivanov, K. I., Savinova, V. K., and Michailova, E. G., mechanism underlying acceleration and retardation of autoxidation of hydrocarbons. I. Influence of accelerators and inhibitors of autoxidation on decomposition of organic peroxides. II. Influence of accelerators and inhibitors of autoxidation on formation of organic peroxides, I, 168.
- Ivanov, L. A., and Stern, E. A., respiration of bacteria, III, 74.
- Ivanov, P. T. See Zilberman, J. I.
- Ivanov, S. M., activity of growth processes; principal factor in frost-resistance of citrus plants, III, 79.
- Ivanova, V. See Rogovin, Z.
- Ivanovics, G., polysaccharide of anthrax bacillus, III, 354. Action of 2-*p*-aminobenzenesulphonamido-4-methylthiazole in experimental pneumococcal infections, III, 757. Precipitation of specific substance [of the capsule of anthrax] by immune sera, III, 868.
- Ivantscheva, E. G. See Pamfilov, A. V.
- Iversen, P., and Roholm, K., aspiration biopsy of liver, and its diagnostic significance, III, 135.
- Ives, D. J. G., and Kerlogue, R. H., isotopic exchange reactions of organic compounds. V. Kinetics of isomerisation and deuterium exchange reaction of Δ^2 -pentenoic acid, I, 442.
- Ives, J. C. J. See Challinor, S. W.
- Ivey, G. See Todhunter, E. N.
- Ivlev, V. S., energy balance of growing larva of *Silurus glanis*, III, 325. Effect of starvation on energy transformation during growth of fish, III, 325.
- Ivy, A. C., and Baehrach, W. H., abnormal mechanism for excitation of gastric secretion in dog, III, 499.
- Greene, R. R., and Burrill, M. W., intersexuality or pseudo-hermaphroditism, III, 656.
and Isaacs, B. L., karaya gum as a mechanical laxative, III, 63.
and McEwen, E. G., physiological consideration of hypertension, III, 634.
and Rudolph, L., physiology of uterine musculature, III, 660.
See also Beazell, J. M., Berman, A. L., Brock, S., Burrill, M. W., Bussabarger, R. A., Chen, Y. P., Culmer, C. U., Danforth, D. N., Elliott, M. C., Fauley, G. B., Gray, J. S., Greene, R. R., Loew, E. R., McEwen, E. G., Richter, O., Schmidt, C. R., and Werch, S. C.
- Iwai, S. See Matsumoto, T.
- Iwamoto, H. See Daniels, T. C.
- Iwanoff, S., thoracic walls and organs in sheep, III, 85.
- Iwasaki, T. See Kobayashi, Teinosuke.
- Iwase, E., fluorescence spectrum and composition of scapolite, I, 303.
- Iwase, K. See Oyama, Y.
- Iyer, B. H., extension of Reformatsky reaction. I. Ethyl bromomalonate and acetone, II, 266.
- Iyer, M. P. V. See Ramaiah, K. S.
- Iznairskaja, N. N., hexyl- and ethylhexylcellulose; synthesis of (I) hexylcellulose, (II) ethylhexylcellulose, II, 7.

J.

- Jacini, G., ferrous salts of oximinoketones and their magnetic behaviour, I, 102.
and Salini, (Signa.) A., derivatives of 3:3'-dipyridyl and of 3:3'-dipyridylene oxide, II, 58.
- Jackli, W., action of sulphapyridine in meningococcal meningitis, III, 677.
- Jackson, A. V. See Burnet, F. M.
- Jackson, D. A., and Kuhn, H., hyperfine structure and Zeeman effect of resonance lines of lithium, I, 49.
- Jackson, D. R., determination of arsenic by the distillation method, I, 38.
- Jackson, E. B. See Brues, A. M.
- Jackson, E. L., and Hudson, C. S., cleavage of carbon chain of β -glucosan by periodic acid, II, 205.
- Jackson, (Miss) E. M. See Gulland, J. M.
- Jackson, H. See Jefferson, G.
- Jackson, H. (Manchester), and Jones, E. R. H., sterol group. XI. Bromination of 7-ketocholesteryl acetate, II, 254.
- Jackson, J. (Birmingham), and Smith, Fred, constitution of arabic acid. III. Isolation of methyl heptamethylaldobionate from methylated degraded arabic acid. IV. Formation of 3-galactosidogalactose by hydrolysis of degraded arabic acid, II, 118.
See also Haworth, W. N.
- Jackson, Julius, and Smith, G. B. L., selenium oxychloro-compounds of pyridine, pyridinium chloride, and related substances, I, 229. Reaction between ammonia and $\text{SeO}_2 \cdot 2\text{HCl}$ and $\text{SeO}_2 \cdot 2\text{HBr}$, I, 229.
- Jackson, R. F. See McDonald, E. J.
- Jackson, R. L., Boyd, J. D., and Smith, T., interchangeability of zinc crystalline insulin and amorphous insulin, III, 733.
See also Falkenstein, D. F.
- Jackson, R. W., excretion of kynurenic acid by members of various families of Carnivora, III, 138.
See also Gordon, W. G.
- Jackson, S. H., Nicholson, T. F., and Holman, W. L., carbohydrate metabolism and staphylococcal infection in rabbits, III, 238.
- Jacob, (Miss) A., Sutcliffe, F. K., and Todd, A. R., vitamin-E. VII. Homologues of α -tocopherol, II, 186.
and Todd, A. R., cannabidiol and cannabinol, constituents of *Cannabis indica* resin, II, 185. *Cannabis indica*. II. Isolation of cannabidiol from Egyptian hashish; structure of cannabinol, II, 259.
- Jacob, E. J. See Beard, H. H.
- Jacob, F. M. See Guy, W. H.
- Jacob, J. P. See Posternak, T.
- Jacobi, H. P., and Baumann, C. A., effect of fat on tumour formation, III, 853.
See also Baumann, C. A.
- Jacobi, J., and Tigges, F., pathogenesis of Cushing's syndrome, III, 402.
- Jacobi, M., Zuckerman, I. C., and Kogut, B., effect of food factors and orally administered bile on rate and quantity of bile secretion, III, 136.
See also Beilly, J. S., and Zuckerman, I. C.
- Jacobi, O. See De Diesbach, H.
- Jacobs, H. R. See Barron, E. S. G.
- Jacobs, J. A. See McLean, W. B.
- Jacobs, J. L., immediate generalised skin reactions in hypersensitive guinea-pigs, III, 775.
Golden, T. S., and Kelley, J. J., immediate reactions, to anhydrides, of wheal-and-erythema type, III, 528.
- Jacobs, R. B., sodium chloride at very high pressures, I, 314.
- Jacobs, T. L., Cramer, R., and Weiss, F. T., acetylenic ethers. I. Phenoxycetylenes, II, 305.
See also Kohler, E. P.
- Jacobs, W., swimming bladders of fish as suspensory organs: gas secretion by *Stephanomia*, III, 814.
- Jacobs, W. A. See Craig, L. C., and Gould, R. G., jun.
- Jacobsen, C. F. See Linderström-Lang, K.
- Jacobsen, R. P., treatment of 2-bromocholestanone with collidine, II, 310.
- Jacobshagen, E., determination of facial measurements in racial investigations, III, 466.
- Jacobsohn, K. P., specific properties of aconitases, III, 346.
and Soares, M., diffusion of aconitases in plant tissues, III, 346.
- Soares, M., and Tapadinhas, J., aconitases, III, 608.
and Tapadinhas, J., aconitases in animal tissues, III, 346.
- Jacobsohn, S., Bent, H. E., and Harrison, A. J., precision spectrophotometer for use in the range 450 to 820 $\mu\mu$, I, 375.
- Jacobson, E., variation of blood pressure with skeletal muscle tension and relaxation. II. Heart beat, III, 633. Variation of blood pressure with brief voluntary muscular contractions, III, 884.
- Jacobson, H. F. See Grosse, A. V.

- Jacobson, M. B. See Berkow, S. G.
- Jacobson, S. A., pathogenesis of multiple hereditary osteochondromatosis, III, 815.
- Jacoby, F., synchronous mitoses in binucleate macrophage *in vitro*, III, 377. Architecture of colonies of fibroblastic sarcomatous cells derived from dibenzanthracene mouse tumour, III, 854.
- Jacoby, M., replacement of oxygen in nests of *Alta seddens*, L., III, 140.
- Jacobziner, H. See Previtali, G.
- Jacokes, J. W. See Hobbs, M. E.
- Jacopetti, M. M., conductometric behaviour of potassium chloride solutions, I, 257.
- Jacotot, H., alumina gel as an adjuvant to antitubercle-plague vaccine, III, 543.
- Jacques, A. G., separation of potassium isotopes in *Valonia* and *Nitella*, III, 825.
- Jacques, L. B., heparinase, III, 609.
- Jaquot, L. See Gleay, P.
- Jadassohn, W. See Fierz-David, H. E.
- Jadhav, G. V., and Sukhatankar, D. R., interaction of sulphuryl chloride with arylamides of aromatic acids. III, II, 129.
- Jäckli, W., treatment of epidemic meningitis with sulphapyridine, III, 920.
- Jaeger, F. M., and Rosenbohm, E., formulae for the true and mean specific heats of platinum between 0° and 1600°, I, 64.
- Jaeger, L. See Mazia, D.
- Jaeger, W. See Karrer, P.
- Jänecke, E., complete phase diagrams with respect to pressure, temperature, and composition of binary systems with vapour pressure maxima in the liquid mixtures. III, I, 26.
- Jaffe, E. See Neill, J. M.
- Jaffe, H. L. See Master, A. M.
- Jaffe, H. von R., crystalline transitions and dielectric constant, I, 360.
- Jaggar, T. A., magmatic gases, I, 303.
- Jagić, N. von, metabolism, intestinal tract, and circulation, III, 189. Cardiac therapy, III, 189.
- Jagitsch, R., structural faults in solids, investigated for oxides of manganese by Hahn's emanation method, I, 31.
- Jahn, G., is one eye or a field of vision (corresponding with one side of the brain) used better than the other? III, 25.
- Jahn, H. A. See Childs, W. H. J.
- Jakeš, E., artificial production of tumour-like growths in plants in the cotyledon stage by means of heteroauxin, III, 942.
- Jakobowicz, R. See Williams, Stanley.
- Jakovleff, C., study of central processes by experimental chronaxie, III, 198.
- Jakovleva, E. A. See Zvjagintzev, O. E.
- Jakubovitsch, A. J., and Klimova, V. A., reaction of ethylenediamine with carbon disulphide: $\alpha\beta$ -dithiocarbimidoethane, II, 156.
- Jakushevski, V. S., naphthaquinacridone, II, 192.
- Jalota, R. S., Narang, K. S., and Ray, J. N., rottlerin. IV. Derivatives of *isorottlerin*, II, 51.
- James, A. L., carbohydrate metabolism of germinating barley, III, 775. See also James, W. O.
- James, G. M., and James, W. O., formation of pyruvic acid in barley respiration, III, 871.
- James, G. V., effect of administration of acetate on detoxication and therapeutic activity of sulphanilamide. I. and II., III, 60, 598. Excretion of sulphapyridine, III, 331.
- James, G. V., detoxication of sulphapyridine, III, 598. Isolation of oxidation products of sulphanilamide from the urine, III, 598. Oxidation of sulphanilamide and sulphapyridine by hydrogen peroxide, III, 598.
- and Fuller, A. T., absorption, conversion, and therapeutic action of benzylsulphanilamide, III, 598. See also Fuller, A. T., and Harris, I.
- James, J. E. D. See Elias, P. G.
- James, N., and Sutherland, M. L., effect of number of colonies per plate on estimate of bacterial population in soil, III, 868.
- James, T. H. mechanism of photographic development. II. Development by quinol, I, 170. Surface conditions of silver halides and rate of reaction. I. Rate of reduction of precipitated silver chloride. II. Reduction of nucleated silver chloride. III. Reduction of silver chloride by hydrazine, I, 223, 365.
- James, W. A., and Gordon, A. R., variation of the differential diffusion constant of hydrochloric acid with temperature, I, 19.
- James, W. O., and Arney, S. E., phosphorylation and respiration in barley, III, 616. and Hora, F. B., effect of cyanide on respiration of barley, III, 363. and James, A. L., respiration of barley germinating in the dark, III, 775. See also James, G. M.
- Jameson, E., and Alvarez-Tostado, C., electrophoresis of serum-proteins, III, 286.
- Jamison, M. M., and Turner, E. E., optical activation of acids and a new resolution process depending on it, II, 173.
- Janacek, O., colloid-chemical processes in separation of calcium hydroxide and saturation with carbon dioxide, I, 210.
- Jander, G., and Spandau, H., determination of molecular and ionic weights of dissolved substances by methods of dialysis and free diffusion, I, 204.
- Janes, R. G., and Nelson, W. O., effect of stilbestrol on phases of carbohydrate metabolism, III, 582.
- Jang, C. S., influence of general anaesthetics on adrenergic transmission, III, 334.
- Janicki, J., oxidation-reduction processes during inhibition and activation of amylase; rôle of ascorbic acid, III, 164.
- Janis, A. A. See Sheffer, H.
- Janitzky, A., determination of radium in preparations freely emitting radon by measuring this in the nascent condition, I, 130.
- Janke, A. [with Holota, J., Miksehek, E., and Hofmann, H.], liberation of proteolytic enzymes from micro-organisms, III, 352.
- Jankelevitsch, Z. A., and Scheka, I. A., mol. wt. of complex compounds of aluminium bromide, I, 25. See also Plotnikov, V. A.
- Jankelson, I. R., dysphagia ascribed to vitamin-B deficiency, III, 750. and Baker, H., infra-red photography of abdominal wall in portal cirrhosis of the liver, III, 135.
- Janneck, W. H., and Wiig, E. O., photochemical investigations. V. Photolysis and iodine-sensitized decomposition of gaseous ethylene iodide, I, 368.
- Jánossy, L., exchange force between three heavy particles due to the meson exchange field, I, 54. and Ingleby, P., penetrating cosmic-ray showers, I, 242. and Rossi, B., photon component of cosmic radiation and its absorption coefficient, I, 242.
- Janot, M. M., and Mendoza, R., identification of a Columbian plant, piniquepinique, as *Rauwolfia heterophylla*, Roem. and Schult. (chalchupa of Guatemala), III, 175.
- Jansen, C. H. See Lane, M. M.
- Jansen, E. F. See Balls, A. K.
- Janssen, R. See Bockemüller, W.
- Jantovski, S., Kravetz, B., and Sokolik, A., spontaneous ignition of hexane-air mixtures, I, 221.
- January, L. E. See Greene, J. A.
- Januschke, H., diet in infants and pharmacological observations, III, 230.
- Janzen, R., and Homeyer, H., provocation of epileptic seizures, III, 486.
- Janzik, K. See Essen, K. W.
- Jaques, L. B., and Mustard, R. A., factors influencing anticoagulant action of heparin, III, 378.
- Jarayaman, N., and Krishnaswami, K. R., occurrence of celestite in the phosphatic nodules of Utatur, I, 180.
- Jarcho, L. W., and Root, W. S., relation of labyrinthectomy to sensitisation of nictitating membrane in cat, III, 570.
- Jarcho, S., and Andersen, D. H., traumatic autotransplantation of splenic tissue, III, 189.
- Jaretzky, R., diuretic action of *Ononis* root and *Equisetum*, III, 760.
- Jarisch, A., Richter, H., and Thoma, H., pulmonary oedema of central origin, III, 479. and Thoma, H., pulmonary changes in cardiazol shock, III, 842.
- Jarkovaja, L. M. See Rakiitin, J. V.
- Jarl, F., individuality of the solids-not-fat of milk; recomputation of material from Illinois Agric. Exp. Sta. Bull., No. 325, III, 852.
- Jaroslav, S., Glagolev, V., and Kreimer, B., action of vegetative nervous system on cisterna chyli and thoracic duct, III, 104.
- Kostenko, A., and Glagolev, V., neurohumoral regulation of testicular lymph-spaces. III., III, 104. Lymph-flow from isolated testes after dilation and constriction of the blood vessels. I. and II., III, 104.
- Jarrell, O. W., marshite and other minerals from Chuquicamata, Chile, I, 182.
- Jarussova, N. S. See Lavrov, B. A.
- Jarvis, F. J. See Hyndman, O. R.
- Jarvis, G. A., positive ion emission from nickel, I, 185.
- Jaskiewicz, S. J. See Levitt, A.
- Jasonni, E. See Addarii, F.
- Jasper, H., and Cipriani, A., method for simultaneous recording of focal cerebral blood flow, pH, electrical activity, and blood pressure, III, 564.
- Jasper, H. H., Fitzpatrick, C. P., and Solomon, P., analogies and opposites in schizophrenia and epilepsy, III, 23.
- Jasvojn, G., rôle played by so-called dark cells, III, 555.
- Jaktar, S. K. K., supersonic velocity in gases and vapours. IX. Specific heats and dispersion of supersonic velocity in organic vapours, I, 247.

- Jaktar, S. K. K. See also Abichandani, C. T., and Datar, D. S.
- Jauch, J. M., and Hill, E. L., degeneracy in quantum mechanics, I, 280.
- Jauncey, G. E. M., position of centre of the Compton modified band, I, 335.
- and Harvey, G. G., theory of diffuse scattering of X-rays from crystals, I, 387.
- Javillier, M., copper and *Aspergillus niger*, III, 74.
- Jaynel, A. See Prichotko, A.
- Jayaraman, N., feldspars from mica pegmatites of Nellore, Madras, I, 303.
- Jayeox, E. K., and Ruehle, A. E., quantitative spectrochemical analysis by measurement of relative intensities, I, 300.
- See also Ruehle, A. E.
- Jeanneret, H., changes in bone marrow after death, III, 877.
- Jedlicky, A., Lipschütz, A., and Vargas, L., sexual specificity of tumours produced by oestradiol esters, III, 215.
- See also Lipschütz, A.
- Jeener, R., and Pourbaix, N., reaction of striped muscle of *Rana temporaria* to close arterial injection of acetylcholine, III, 296.
- Jeffcoat, T. N. A., oestrogens and missed abortion, III, 810.
- Jeffers, W. A., Lindauer, M. A., Twaddle, P. H., and Wolferth, C. C., experimental hypertension in nephrectomized parabiotic rats, III, 711.
- Jefferson, G., extrasellar extensions of pituitary adenomas, III, 641.
- and Jackson, H., tumours of the lateral and 3rd ventricles, III, 298.
- Jefferson, M. E. See Hendricks, S. B.
- Jeffery, G. H. See Cowan, D. M.
- Jelinek, B. See Dedek, J.
- Jenckel, E., and Bräucker, E., polyacrylic acid glasses, I, 197.
- and Lagally, P., temperature-dependence of tensile strength of a polystyrene glass, I, 312.
- Jendrassik, L., and Dziobek, L., determination of sodium using the torsion balance, III, 946.
- Jenkins, F. A., and Rochester, G. D., absorption spectra of diatomic fluorides in the carbon-tube furnace, I, 343.
- Jenkins, G. L. See Sumerford, W. T.
- Jenkins, H. O., dipole moment and alkyl chain length, I, 10. Relations between electrostatic potentials and reaction velocities, I, 30. Degeneracy and dissociation constants, I, 163. Resonance in the chloroacetic acids, I, 285.
- and Dippy, J. F. J., anomalous strength of *n*-butyric acid, I, 214.
- See also Evans, D. P.
- Jenner, A. W. F., gastric carcinoma in pernicious anaemia, III, 282.
- Jennings, D., perforated peptic ulcer, III, 500.
- Jennings, F. B. See Smyth, C. P.
- Jennings, L. See Abramson, H. A.
- Jennings, S. See Brunschwig, A.
- Jenny, H., and Overstreet, R., surface migration of ions and contact exchange, I, 109.
- Jenovese, J. F., Osterberg, A. E., and Rynearson, E. H., rôle of vitamin-C in Addison's disease, III, 846.
- Jensen, A. T., and Beever, C. A., thermal investigation of inorganic salts, I, 64.
- Jensen, D. See White, F. W.
- Jensen, H. (Hamburg), physical interpretation of crystallographic ionic radii, I, 12. Classification of isotopes, I, 139. Stable atomic nuclei and present position as regards their classification, I, 143.
- Jensen, Hans, carbohydrate metabolism, III, 433.
- Geiling, E. M. K., and Tolksdorf, S., gonadotropic activity of anterior pituitary of finback whale, III, 403.
- and Tolksdorf, S., effect of picric and flavianic acids on potency of follicle-stimulating anterior pituitary hormone, III, 404.
- Tolksdorf, S., and Bamman, F., purification of interstitial cell- and follicle-stimulating hormones of pituitary gland, III, 900.
- Tolksdorf, S., and Grattan, J. F., effect of heat on gonadotropic pituitary antagonist, III, 577.
- See also Evans, H. M., and Tolksdorf, S.
- Jensen, H. B., and With, T. K., vitamin-A and carotenoids in liver of mammals, birds, reptiles, and man, with regard to intensity of ultra-violet absorption and Carr-Price reaction of vitamin-A, III, 49.
- Jensen, H. W., speedier and less costly method of concentration in nitrocellulose imbedding, III, 786.
- Jensen, J., treatment of cardiac decompensation in U.S.A., III, 189.
- Jensen, K. A. See Delépine, M.
- Jensen, P., existence of the ^3He nucleus, I, 278.
- Jensen, T., and Hansen, K. G., active spectral range for phylogenetic photodermatosis produced by *Pastinaca sativa*; (dermatitis bullosa striata pratensis, Oppenheim), III, 254.
- Jentschke, W., and Frankl, F., transmutation products from uranium bombarded with neutrons, I, 142.
- Jentzsch-Uchinski, C. See Vogel, R.
- Jérémine, (Mme.) E., granites from the Vosges, I, 333.
- Jermolenko, I. A. See Tzukervanik, I. P.
- Jermolenko, N. F., and Guterman, V. J., emulsifying power of natural emulsifiers, I, 410.
- and Levina, S., periodic sedimentation from solutions during evaporation of the solvent, I, 19.
- and Rozova, activation of carbon with salts, I, 438.
- Jermolieva, Z. V., and Beljaeva, E. I., nature of bacteriophage, III, 77.
- and Bujanovskaja, I. S., lysozyme, its properties and applications, III, 72.
- Jermsta, J. See Spink, W. W.
- Jervis, G. A., amaurotic family idiocy, III, 891.
- Block, R. J., Bolling, D., and Kanze, E., chemical and metabolic studies on phenylalanine. II. Phenylalanine content of blood and spinal fluid in phenylpyruvic oligophrenia, III, 675.
- See also Block, R. J., and Ferraro, A.
- Jerzmanowska, Z., thermal dissociation of glucosides, II, 155.
- Jespersen, K. K., solution of sucrose for injection, III, 256.
- Jesse, W. P., seasonal studies [of cosmic rays] at high altitudes, I, 189. Time-variations in cosmic-ray intensity at high altitudes, I, 400.
- See also Schein, M.
- Jessiman, J. B., cerebral oedema in scarlet fever, III, 200.
- Jessup, J. S., hypothalamus of *Hydraspira*, III, 717.
- Jett-Jackson, C. E., hormonal factor in repair of uterine tissue in albino rat, III, 126.
- Jette, E. R. See Foote, F.
- Jettmar, H. M., resistance of larvae of latrine fly, *Chrysomya megacephala*, against chemicals, III, 600.
- Jevons, W. See Barrow, R. F.
- Jewell, M. E., ecology of fresh water sponges of Wisconsin. II. Influence of calcium, III, 315.
- Jha, V. R. See Ranjan, S.
- Jimoschuk, D. See Leipunski, A. I.
- Jirovec, O., and Rodová, H., propagation of *Trichomonas*, III, 768.
- Jnoff, G., attempted preparation of α -oxido- α -ethylpropionitrile, II, 157.
- Jó, J., development of epilepsy, III, 201.
- Joachimoglu, G., and Panagopoulos, K., detection of different types of sugar in urine, III, 910.
- Job, P., and Brigando, J., derivatives of diethylenetriamine [di-(β -aminoethyl)-amine], II, 207.
- Jochim, K. See Katz, L. N.
- Jodar, E. O., tanning from ultra-violet irradiation brought out by blood transfusion, III, 471.
- Joël, C. A. See Pollák, O. J.
- Joël, K., and Pollák, O. J., human spermatozoa, III, 131.
- See also Wenner, R.
- Jörg, H., ability of pneumococci to activate hydrogen donors and acceptors, III, 770.
- Jørgensen, H., apparatus for determining oxidation-reduction potentials in a vacuum, I, 40.
- Jofa, S., and Frumkin, A., electrocapillary curves of concentrated solutions of acids, I, 22.
- See also Bruns, B., and Kabanov, B.
- Joffe, J. S. See Erschov, A. P.
- Joffe, V. A. See Vuks, M. F.
- Johannson, A., X-ray studies of mercury alkylthiol chlorides, II, 208.
- Johansen, D. A., quadruple stain combination for plant tissues, III, 181.
- Johansen, G. See Linderstrøm-Lang, K.
- John, F. See Clar, E.
- John, M. B. See Spiller, W. F.
- John, T., and Bowden, S. T., formation of ketals by action of potassium on benzpinacol, II, 128.
- See also Bowden, S. T.
- John, W., and Emte, W., anti-sterility factors (vitamin-E). VII. Red oxidation products of the tocopherols, II, 258.
- and Gunther, P., syntheses of chroman derivatives with the ring system of α -tocopherol. II, II, 101.
- and Schmeil, M., syntheses of chroman derivatives with the ring system of α -tocopherol. III. Introduction of a side-chain into hydroxytetramethylchroman, II, 101.
- Johns, G. A. See Werner, A. A.
- Johns, H. E., viscosity of liquid hydrogen, I, 105.
- See also Greaves, J. D.
- Johns, I. B. See Kirchner, J. G., Naps, (Miss) M., and Oldham, W.
- Johnson, A. A., and Phipps, T. E., differential method applied to surface ionisation of sodium halides on tungsten, I, 12.
- Johnson, A. C. See Hawkins, W. B.
- Johnson, B. B. See Paff, G. H.

- Johnson, B. K., achromatic objective for ultra-violet microscopy, I, 132.
- Johnson, C. A., and Wakerlin, G. E., antiserum for renin, III, 711.
- Johnson, C. H. See Bushra, E.
- Johnson, D. W., and Palmer, L. S., individual and breed variations in pigs on rations devoid of vitamin-D, III, 54.
- Johnson, E., insulin shock treatment in schizophrenia, III, 201.
- Johnson, E. A. See Goranson, R. W.
- Johnson, E. R., Aude, R. M., and Sorum, C. H., use of the photometer in making Lange [colloidal gold] test readings, III, 487.
- Johnson, E. W. M. See Hamilton-Paterson, J. L.
- Johnson, F. See Chance, B.
- Johnson, F. H., luminescence of bacterial suspensions; reactions concerned in luminescence, III, 167.
- Schouwenburg, K. L. van, and Burg, A. van der, flash of luminescence following anaerobiosis of luminous bacteria, III, 167.
- Johnson, G. See Sunde, C. J.
- Johnson, H. See Cole, H. N.
- Johnson, H. B. See Smith, C. H.
- Johnson, H. J., 2400 electrocardiograms in apparently healthy males, III, 383. Action of short radio waves on tissues. III. Comparison of thermal sensitivities of transplantable tumours *in vivo* and *in vitro*, III, 590. See also Short, J. J.
- Johnson, J. H., Iceland spar in Taos Co., New Mexico, I, 238. Lime-secreting algae and algal limestones from the Pennsylvanian of Central Colorado, I, 304.
- Johnson, J. M., racemisation of glutamic acid, II, 269. Comparison of optical forms of glutamic acid from normal and cancerous tissue, III, 424.
- Johnson, K. [with Degering, E. F.], utilisation of aliphatic nitro-compounds; preparation of amines and oximes, III, 3.
- Johnson, K. R. See Mehlig, J. P.
- Johnson, L. D., catalytic oxidation, I, 366. Chemiluminescence or cold light investigations, I, 430.
- Johnson, L. M., Parsons, H. T., and Steenbock, H., effect of heat and solvents on nutritive value of soya-bean protein, III, 318.
- Johnson, L. R. See Thorvaldson, T.
- Johnson, L. V., and Eckardt, R. E., rosacea keratitis and conditions with vascularisation of cornea treated with riboflavin, III, 638.
- Johnson, M. H. See Halpern, O.
- Johnson, M. J. See Berger, J.
- Johnson, M. W., and Riddle, O., tests of mammalian gonad-stimulating hormones on gonads of fishes, III, 216. See also Riddle, O.
- Johnson, P., and Moelwyn-Hughes, E. A., kinetics of decarboxylation in solution, I, 260. See also Moelwyn-Hughes, E. A.
- Johnson, P. R., Barnes, H. M., and McElvain, S. M., keten acetals. IV. Polymerides of keten diethyl acetal, II, 202.
- Johnson, R. See Dack, G. M.
- Johnson, R. E. See Dill, D. B.
- Johnson, R. P., hole theory of diffusion, I, 19.
- Johnson, S. H., Leberman, P. R., Pepper, D. S., and Lynch, H., sulphapyridine in treatment of gonococcal urethritis in male, III, 331.
- Johnson, T., and Newton, M., influence of light and other environmental factors on mature-plant resistance of Hope wheat to stem rust, III, 872.
- Johnson, T. A., and Bockus, H. L., scrum-lipase, III, 840. See also Boerner, F.
- Johnson, T. B., pyrimidines. CLXV. Reaction of thiocarbamide with 5:5-dibromo-hydroxyhydrouracil and -barbituric acid, II, 382. See also Riehl, (Miss) D.
- Johnson, T. H., evidence that protons are primary particles of hard component [of cosmic rays], I, 189. and Barry, J. G., contributions of showers to coincidences recorded at high elevations, I, 142.
- Barry, J. G., and Shutt, R. P., direct evidence of a proton component of cosmic radiation, I, 309.
- Johnson, V. A., effect of valency electrons and electron cloud distortion on intensities in electron and X-ray scattering, I, 286.
- Johnson, W. S. See Fieser, L. F.
- Johnson, W. W., cryptorchidism, III, 34.
- Johnston, C. G., Irvin, J. L., and Walton, C., free choline and phospholipin of hepatic and gall-bladder bile, III, 136. See also Irvin, J. L., Ravdin, I. S., and Smith, A. H.
- Johnston, C. N., and Atkins, O. A., automatic plant irrigator and recorder, III, 545.
- Johnston, F. D., and Kline, E. M., the stethoscope, III, 473.
- Johnston, G. M. See Boyd, E. M., and Connell, W. F.
- Johnston, G. W. See Greene, J. A.
- Johnston, H. L., and Marshall, A. L., vapour pressures of nickel and of nickel oxide, I, 353. See also Rossini, F. D.
- Johnston, H. P. See Stearn, A. E.
- Johnston, J. A., factors influencing retention of nitrogen and calcium in period of growth. III. Puberty in normal girl and in girl with minimal reinfection type of tuberculosis, III, 739. and Maroney, J. W., effect of thyroid on nitrogen retention, III, 496. Effect of thyroid on calcium retention [during period of growth], III, 725.
- Johnston, J. H. See Barrett, H. M.
- Johnston, J. M. See Bracken, M. M.
- Johnston, R. A. See Bloxson, A.
- Johnston, R. W., and Tilley, C. E., fluorite from Selibin, Malaya, I, 380.
- Johnston, S. A. See McBain, M. E. L.
- Johnston, T. A. See Shepherd, M. L.
- Johnston, T. B., early human embryo, with 0.55 mm. long embryonic shield, III, 874.
- Johnston, V. G. See Noer, R. J.
- Johnston, W. R. See Jordan, J. H.
- Johnstone, F. E., jun., chromosome doubling in potatoes induced by colchicine, III, 776.
- Johnstone, K. I., relationship of oxidation-reduction potentials developed in bacterial cultures to production of hydrogen peroxide, III, 768. See also Cooper, K. E., and Gordon, J.
- Joki, E., and Melzer, L., acute fatal non-traumatic collapse during work and sport, III, 762.
- Jolibois, P., theory of aqueous electrolysis, I, 297.
- Joliot, F. See Aston, F. W., and Halban, H., jun.
- Jolles, E., reactions of aliphatic diazo-compounds. I, II, 165.
- Jolles, Z. E., and Morgan, W. T. J., isolation of glucosamine and chondrosamine, II, 365.
- Jolliffe, L. S. See Lozner, E. L.
- Jolliffe, N., diagnosis, treatment, and prevention of vitamin-B₁ deficiency, III, 818.
- Bowman, K. M., Rosenblum, L. A., and Fein, H. D., nicotinic acid deficiency encephalopathy, III, 323.
- Goodhart, R., Gennis, J., and Cline, J. K., experimental production of vitamin-B₁ deficiency in normal subjects; dependence of urinary excretion of thiamin on dietary intake of vitamin-B₁, III, 232. See also Most, H., and Rosenblum, L. A.
- Joltrain, E. See Tournade, A.
- Joly, M., viscosity of unimolecular surface films, I, 69. Viscosity of surface layers of proteins, I, 159.
- Jombres, P., inhibitory action of spleen on bone marrow, III, 289.
- Jonas, L. See Elsom, K. O.
- Jones, A. B., Schüller-Christian disease, III, 434.
- Jones, A. M., and Bramwell, C., alcoholic beri-beri heart, III, 291.
- Jones, C., and Ruark, A. E., stereoscopic viewing and measuring instrument for cloud chamber photographs, I, 376.
- Jones, C. B. See Ecker, E. E.
- Jones, C. M., gastro-enterology, III, 132.
- Jones, D. B. See Horn, M. J., and Melampy, R. M.
- Jones, E., and Abse, D. W., sulphanilamide therapy in bacillary dysentery, III, 331.
- Jones, E. E., negative effects of cysteine hydrochloride on regression of carcinoma in line A albino mice, III, 317. Tumour incidence in line A albino mice following injections of progynon-B, III, 670. See also Smith, G. Van S.
- Jones, E. L., inhibitions of autonomic nervous system by eye stress, III, 114.
- Jones, E. M. See Marker, R. E.
- Jones, E. R. H., and Meakins, R. J., lupanetriol and its oxidation, II, 228. Oxidation of lupenyl esters, II, 377. See also Barnett, (Miss) J., Cross, L. C., and Jackson, H.
- Jones, F. E., quaternary system CaO-Al₂O₃-CaSO₄-H₂O at 25°, I, 74.
- Jones, F. W., nature of soft palate, III, 177. Attainment of upright posture in man, III, 784. and Lambert, V. F., occurrence of lemure form of ectotympanic in a primitive marsupial, III, 85.
- Jones, G., and Colvin, J. H., viscosity of solutions of electrolytes as a function of the concentration. VII. Silver nitrate, potassium sulphate, and potassium chromate, I, 203. and Staufier, R. E., viscosity of solutions of electrolytes as a function of the concentration. VI. Potassium bromide and lanthanum chloride, I, 203.
- Jones, H., energy distribution and positive excess of mesotrons, I, 189. and Hughes, D., magnet and cloud chamber for cosmic-ray studies, I, 235.

- Jones, H. B., Chaikoff, I. L., and Lawrence, J. H., radioactive phosphorus as an indicator of phospholipin metabolism. X. Phospholipin turnover of fraternal tumours, III, 590.
- Jones, H. C. See Altemeier, W. A.
- Jones, H. M., self-selected diets in toxic goitre, III, 894.
- Jones, I. H., attempt at precision measurements of ear, III, 27. Vitamins and ear, nose, and throat, III, 845.
- Jones, J. C. See Bullock, L. T.
- Jones, J. H., rachitogenic diets composed of purified food materials, III, 54. Comparison of cereal and non-cereal diets in the production of rickets, III, 426.
- Jones, J. K. N. See Beaven, G. H., Hawkins, E. G. E., Haworth, W. N., and Hirst, E. L.
- Jones, J. L., kinetic studies on iodine derivatives. I. Thermal decomposition of acetyl iodide, I, 120.
- Jones, J. M. See Miller, A. T., jun.
- Jones, J. W., histological changes in testis in sexual cycle of male salmon parr, III, 811.
and Orton, J. H., paedogenetic male cycle in *Salmo salar*, L., III, 811.
- Jones, L. See Greaves, J. E.
- Jones, L. A., and Tuttle, C., isolation of desired qualities of radiant energy for biological experimentation, III, 447.
- Jones, L. R. See Christensen, L. R.
- Jones, M. S., coma resistance and adrenalemia in insulin treatment of schizophrenia, III, 305.
- Jones, R. See Crowther, J. A.
- Jones, R. C., theory of thermal diffusion coefficient for isotopes, I, 389.
and Furry, W. H., calculation of thermal diffusion constant from viscosity data, I, 203.
- Jones, R. G. See Gilman, H.
- Jones, R. M., human sternal bone marrow in hyperthyroid and myxoedematous states, III, 787.
- Jones, R. N., ultra-violet absorption spectra of derivatives of 1:2-benzanthracene, I, 93.
See also Creech, H. J.
- Jones, R. R. See Crosson, J. W.
- Jones, T. G. H., reduction of tagetone to tagetol, II, 114.
See also Hancox, N. C., and Lahey, F. N.
- Jones, T. S. G. See Greville, G. D., and Wilkinson, J. F.
- Jones, T. T., and Melville, H. W., determination of lifetime of active polymeric molecules, I, 320.
See also Melville, H. W.
- Jones, W. M., magnetic observations of Nelson serpentinities; geology of the asbestos deposits, I, 239.
- Jones, (Miss) W. O. See Hirst, E. L.
- Jones, W. W., determination of relative humidity while measuring respiration in a gas train system, III, 550.
- Jonesco-Sisesti, M., Sager, O., and Askenasy, H., histological lesions of central nervous system produced by ischemia, III, 484.
- Jongbloed, J., carbon monoxide in alveolar air after tobacco smoking, III, 195.
- Jongkees, L. B. W. See Dishoeck, H. A. E. van.
- Jonnard, R., analysis of biological compounds containing deuterium by interference refractometry, III, 176.
See also Ruskin, S. L.
- Jonsell, S., determination of the heart size by teleroentgenography, III, 292.
- Jonsson, G. See Carlström, B.
- Jonxis, J. H. P., spreading of different haemoglobins, muscle haemoglobins, and cytochrome c, III, 69.
- Joplin, G. A., metamorphism and assimilation in the Cooma district of New South Wales. I. Amphibolites and their metasomatism, I, 136.
- Jordan, D. P. See McClintock, J. T.
- Jordan, E. See Vermillion, G.
- Jordan, H. E., study of fibrillogenesis in connective tissue by method of dissociation with potassium hydroxide, III, 466. Origin and significance of megakaryocytes of lungs, III, 704.
- Jordan, J. H., Blakelock, J. H., and Johnston, W. R., sulphapyridine for cerebrospinal fever, III, 861.
- Pedersen, H., and Shu, S., bites of rabid animals treated by experimental cautery with ultra-violet rays and eosin, III, 528.
- Jordan, J. W., and Osborne, E. D., contact dermatitis from opium derivatives, III, 254.
- Jordan, P., cosmological constancy of the fine structure constants, I, 6. Physical investigation of protein molecules, I, 350.
- Jordan, W. H., electrical axis of heart by direct observation, III, 792.
- Jores, A., rhythmic processes in life, III, 224.
- Jorgensen, G. M. See Christian, H. S.
- Jorgensen, M. N., Dietz, N., and Hill, F. C., potassium as a toxic factor in intestinal obstruction, III, 585.
- Joris, G. G., and Taylor, H. S., exchange reactions of nitrogen isotopes on iron and tungsten surfaces, I, 32.
- Jorissen, W. P., extinction limits of flames, I, 76.
- Bassett, H., Damiens, A., Fichter, F., and Remy, H., report of the Committee for the reform of inorganic chemical nomenclature, 1940, I, 443.
and Dekking, (Miss) A. C. B., induced oxidation in autoxidation of xanthine, I, 168.
and Lebbink, H. O., influence of salts on lowest temperature at which a reaction between methane and oxygen is observed, I, 33.
- Jorpes, E., Edman, P., and Thaning, T., neutralisation of heparin by protamine, III, 93.
- Joschpa, I. E., and Spiridonova, O. P., laboratory production of liquid N_2O_4 , I, 42.
- Josefsson, H., endometriosis of sigmoid colon, III, 905.
- Joseph, G. H., ion adsorption by pectin, I, 252.
- Joseph, L., nitrogen-containing carcinogenic substances, III, 44.
and Gardner, J. H., action of Grignard reagents on heavy-metal salts. III. Mixed Grignard reagents and silver bromide, II, 121.
- Joseph, M. See Anderson, E.
- Joseph, N. R. See Starr, I.
- Josephson, V., Froman, D. K., and Stearns, J. C., simultaneous penetrating rays from the atmosphere, I, 188.
- Joshel, L. M. See Fieser, L. F., Hersberg, E. B., and Newman, M. S.
- Joshi, S. S., threshold potentials and reactivity under electrical discharge, I, 169.
- Josifova, M. A., seasonal variations in the phosphatide content of frog muscles, III, 106. Seasonal changes in phosphatide content of [skeletal muscles of] vertebrates, III, 713.
- Joslin, E. P. See White, P.
- Joslyn, M. A. See MacKinnon, G.
- Jossem, E. L., admission of pure gases to vacuum systems, I, 331.
- Josserand, A. See Berard, L.
- Jost, H., and Emde, H., chemical changes of triosephosphoric acids in glycolysis, III, 349.
- Jourdan, F. See Hermann, H.
- Jourdonais, L. F., and Bruger, M., sojourn of insulin in blood of rabbits after massive doses, III, 412.
- Jousma, A. S., detection of small amounts of mustard gas, II, 240.
- Jouve, X. See Olmer, D.
- Jouvet, See Andrieux.
- Jovanović, M. See Milosavljević, D.
- Joy, E. A., intracelomic grafts of eye primordium of the chick, III, 278.
- Joyce, F. T. See Tidrick, R. T.
- Joyet-Lavergne, P., effect of testosterone propionate on the living cell, III, 216. Effect of male sex hormone on plant cells and sensitivity of cells to action of sex hormones, III, 366.
- Ju, T. Y. See Shen, G.
- Jueys, A., self-consistent field with exchange for carbon, I, 55.
- Juday, C. See Knudson, H. W.
- Judin, I. D., behaviour of phosphoric acid solutions as ideally concentrated solutions, I, 27. Protective films on iron from vapour of silico-organic compounds, I, 229.
- Judin, N., goitre caused by eating cabbage, III, 894.
- Judkevitch, R. See Kabanov, B.
- Judy, F. R. See West, E. S.
- Jühling, L., lipins and blood coagulation, III, 628.
See also Wöhlisch, E.
- Juge-Boirard, G., comparison of logarithmic formulae linearly relating viscosities and temperatures, I, 65.
- Jukes, T. H., vitamin-B₆ deficiency in chicks, III, 234. Effect of yeast extract and other supplements on growth of chicks fed on simplified diets, III, 595. Prevention of perosis by choline, III, 749.
and Heitman, H., jun., biological assay of thiamin with chicks, III, 512.
and Sanford, T. D., vitamin-D requirements of young turkeys, III, 54.
See also Babcock, S. H., jun., and Daft, F. S.
- Julesz, M., and Winkler, E., action of ketogenic diet in allergic conditions and bronchial asthma, III, 239.
- Julian, O. C. See Allen, J. G.
- Jullanelle, L. A., specific antiserum treatment of staphylococcal septicemia, III, 332.
- Jullien, A., absence of choline-esterase from purple gland of *Murex*, and its significance, III, 315.
- Vincent, D., Vuillet, M., and Bouchet, M., effect of drugs on heart of *Helix pomatia*, III, 13. Action of cardiac extracts on the heart of *Helix pomatia*, III, 382.
See also Marduel, H.
- Junet, R. See Sciclounoff, F.

- Jung, F., solubility and action of arsine in blood, III, 188. So-called sulphæmoglobin, III, 479.
- Jung, R., and Weisschedel, E., abolition of motor functions after localised exclusion by electrocoagulation, III, 485. See also Weisschedel, E.
- Jungeblut, C. W., vitamin-C therapy in experimental poliomyelitis, III, 455. Failure of hypnotic and convulsive agents to alter course of experimental poliomyelitis, III, 721.
- and Bailly, M. D., Schick reaction and menstrual cycle, III, 127.
- and Feiner, R. R., ultra-violet irradiation and vitamin-C metabolism, III, 234.
- Jungers, J. C., and Yeddanapalli, L. M., polymerisation of ethylene by alkyl radicals, I, 226.
- Jungheim, H. See Pfing, F.
- Jungherr, E., and Wolf, A., gliomas in animals; report of two astrocytomas in common fowl, III, 228.
- Jungkunz, R. See Pritzker, J.
- Junkmann, K., mode of action of neotropin, III, 922.
- Junowicz-Koeholaty, R., and Hogness, T. R., spectroscopic determination of cytochrome c and its distribution in mammalian tissues, III, 71.
- Junusov, S., Konovalova, R. A., and Orëkhov, A. P., alkaloids of the Papaveraceae family. V. Alkaloids of *Roemeria refracta*, D.C.; structure of roemerine, II, 197. Alkaloids of *Fritillaria sewerzowii*, II, 198. See also Konovalova, R. A.
- Jurashevski, N. K., and Stepanov, S. I., alkaloids of *Girgensohnia diptera*, Bge., Chenopodiaceae family, II, 197. Alkaloids of *Petrosimonia monandra* (Pall.), Bge. (Chenopodiaceae family), III, 550.
- Juriev, J. K., Minatshev, C. M., and Samurskaja, K. A., catalytic transformations of heterocyclic compounds. XIV. Transformation of oxygen-containing five-membered ring systems into nitrogen- and sulphur-containing rings, II, 187.
- and Tronova, V. A., catalytic transformations of heterocyclic compounds. XV. Permanence of activity of the catalyst in the reactions of conversion of furanidin into pyrrolidine or thiophan, II, 260.
- Jurist, A. E. See Bickford, C. F.
- Jurshenko, A. I., and Skrinnikova, G. N., electrochemical studies with diaphragms. IV. Transport of ions through double diaphragms, I, 219.
- Jurukoff, B., cloudy urine, III, 667.
- Jusefovitch, A. A. See Rusinov, L. I.
- Just, F., and Fink, H., biochemistry of *Torula utilis*. III. Phosphate contents of *T. utilis* and of brewer's yeast, III, 350. See also Fink, H.
- Justi, E., and Kohler, M., electrical conductivity of alkali metals in a magnetic field, I, 103.
- Justoni, R., aromatic acetals, II, 175. See also Quilico, A.
- Jusupova, S., montmorillonite from West Sulyukta, I, 179. See also Sedletzki, I. D.
- Juvancz, I. See Hegedüs, M.
- Juza, R., determination of nature of binding in adsorption media, I, 208.
- Juza, R., and Langheim, R., sorption of oxygen by active carbon, determined by magnetic measurements, I, 22.
- K.
- Ka, H., determination of glycerol, II, 294. Variation of monthly average of vitamin-A and carotene content of cow liver at slaughter house near Hsinking and nutrition of cows in Manchuria district, III, 320.
- Ka, T., action of tyrosine and glycine on blood-sugar content in Eck fistula dogs, III, 501.
- Kabadi, M. B. See Mehta, S. M.
- Kabakjian, D. H., luminescence of pure radium and barium compounds, I, 282. Luminescence of pure crystals, I, 344.
- Kabanov, B., and Jofa, S., hydrogen over-voltage on lead and capacity of the lead electrode, I, 28.
- and Judkevitch, R., lead electrode. II. Capacity of double layer and measurement of true surface, I, 259.
- Kabat, E. A., and Furth, J., chemical and immunological studies on the agent producing leukosis and sarcoma of fowls, III, 228. See also Furth, J., and Lipmann, F.
- Kabat, H., cardio-accelerator fibres in vagus nerve of the dog, III, 382. Influence of pregnancy and lactation on susceptibility to arrest of brain circulation, III, 720.
- and Dennis, C., resistance of young dogs to acute arrest of cephalic circulation, III, 293.
- Kabatschnik, M. I., synthesis of pyraclidone derivatives, II, 193.
- Kabelitz, G., action of hypertonic saline in dysentery, III, 219.
- Kachmar, J. F. See Ruchhoff, C. C.
- Kadatsu, M., chemistry of muscle protein. I. Distribution of nitrogen in rabbit muscle plasma, III, 391.
- Kade, C. F. See Sunde, C. J.
- Kadonaga, C., pharmacology of areca alkaloids; arecaidine hydrochloride and methiodide; arecaidine methylbetaine, III, 679.
- Kaely, D. See Wilson, A. T.
- Kämmerer, H., bronchial asthma and allergy, III, 387.
- Kaether, H., action of human serum on reticulo-endothelial phagocytosis, III, 285.
- Kagan, B. O., biochemical properties of S and O variants of *Leuconostoc mesenteroides*, III, 74.
- Kahan, T., formulae and theoretical curves for γ -rays, I, 6.
- Kahlen, C., action of digitaloids in cardiac failure, III, 250.
- Kahler, H., and Davis, E. F., riboflavin determinations on normal liver and liver tumour, III, 855.
- Kahler, H. L., determination of sulphate by the tetrahydroxyquinone method; effect of sodium sulphite and procedure for its elimination, I, 370.
- Kahlmeter, G., allergic reactions in articular and periarticular rheumatism, III, 254.
- Kahlstorf, A., Thomas slag pneumonia, III, 159.
- Kahn, A. J., intercostal nerve physiology, III, 843.
- Kahn, B. See Fröhlich, H.
- Kahn, E., Lion, E. G., and Zimmerman, H. M., cerebral cortical calcification simulating Pick's disease, III, 22.
- Kahn, E. A. See Braden, S.
- Kahn, J. R. See Goldblatt, H.
- Kahn, R. L., serologic verification test in diagnosis of latent syphilis, III, 689.
- Kahovec, L., and Kohlrausch, K. W. F., Raman effect and problems of constitution. XV. Rotation isomerism in dissolved $\alpha\beta$ -di-iodoethane, I, 346.
- Kaiju, M., liver-arginase. II. Arginase activity of liver autolysates. III. Effect of arginase on acetyl-L-phenylalanyl-D-arginine, III, 665. See also Utzino, S.
- Kain, C. K. See Adams, R.
- Kaiser, D. W. See Raiford, L. C.
- Kaiser, E. P., models of ternary systems, I, 360. and Parrish, W., preparation of immersion liquids for the range n_D 1.411 to 1.785, I, 40.
- Kaiser, E. W. See Smith, L. I.
- Kaiser, F. J., distribution of quinine in blood, III, 522.
- Kaiser, H., problems of light excitation in spark sources, I, 331.
- Kaiser, H. F., completely portable radio-activity meter requiring no high-voltage battery, I, 331.
- Kaiser, P., participation of histamine in inflammatory processes, III, 154.
- Kaiser, S., and Albaum, H. G., early root and shoot growth in two varieties of *Avena sativa* in relation to growth-substances, III, 459.
- Kajanoja, P., effect of under-nourishment on milk production of newly-calved cows, III, 230. Effect of insufficient protein feeding on milk production of newly-calved cows, III, 230.
- Kaji, S. M., and Venkataraman, K., mechanism of degradation of cellulose, II, 207.
- Kakinoki, J., investigation of thin films of cellulose derivatives by electron diffraction, I, 287.
- Kakinuma, S., micro-determination of glucose, free and conjugated glucuronic acid. I. Determination of free and conjugated glucuronic acid in presence of glucose in aqueous solution, II, 241.
- Kaku, T., Ri, H., and Hara, N., forsythins as isomeride of phillyrin (philyroside); its constitution, II, 231.
- Kal, V. V. See Malkov, A. M.
- Kalabuchov, N. I., effect of temperature on oxygen consumption by wood mouse (*Apodemus sylvaticus*, L.) and yellow-necked mouse (*A. flavicollis*, Melch.), III, 596.
- Kalauch, K. See Manegold, E.
- Kalbfell, D. C., and Cooley, R. A., radio-isotopes of Ba and Cs, I, 340.
- Kalcker, H., coupled phosphorylation and oxidation in kidney extracts, III, 675.
- Kalich, F. V. See Sondern, C. W.
- Kalina, R. See Ecker, E. E.
- Kalinin, M. N., action of organomagnesium compounds on trialkoxychlorosilanes, II, 246.
- Kalinin, S. K. See Novochatski, I. P.
- Kalk, H., action of vitamin-C in agranulocytosis, III, 184. and Koelsch, K., electrocardiographic changes from oesophageal hernia, III, 190.
- Kallschauer, O. See Dreisch, T.

- Kalmanson, G., and Bronfenbrenner, J., purification of bacteriophage, III, 171.
- Kalmus, H., diurnal rhythms in axolotl larva and in *Drosophila*, III, 421.
- Kalthof, F. See Antropoff, A. von.
- Kaltreider, N. L., and Meneely, G. R., effect of exercise on volume of blood, III, 704.
- Kamada, T., ciliary reversal of *Paramecium*, III, 868.
- and Kinoshita, H., calcium-potassium factor in ciliary reversal of *Paramecium*, III, 610. Membrane potential of sea-urchin egg, III, 763.
- Kamal, A. See Akram, M.
- Kamazawa, M. See Akahira, T.
- Kambara, S., dipole moment of cedrene, I, 98.
- Kameda, H., lipins of acid-fast soil bacilli, II, 111, 933.
- Kameda, Y. See Asano, M.
- Kamen, M. See Kurie, F. N. D.
- Kamen, M. D. See Barker, H. A., Hahn, P. F., and Ruben, S.
- Kamerman, P., micro-determination of arsenic, I, 38.
- Kameyama, N., and Mizuta, K., photo-conductance of silver bromide containing silver iodide, I, 386. Photo-conductance of dye-sensitized silver bromide and the mechanism of dye-sensitisation, I, 387.
- Kamin, H. See Wagreich, H.
- Kamiyama, M., arc spectrum of nitrogen (N I). II. A. Extreme ultra-violet region, I, 49.
- and Sugiura, T., nitrogen afterglow, I, 87.
- Kamlet, J., modified Folin-Malmros micro-blood-glucose determination, III, 472. See also Rosenthal, L.
- Kamm, O. See Emmett, A. D., and Ewing, D. T.
- Kampmeier, R. H., Smith, D. W., and Larsen, R. M., blood studies in lymphogranuloma venereum, with special reference to serum-proteins, III, 187.
- Kan, K. Z., morphological response of transplanted pituitary gland to castration and thyroidectomy, III, 120.
- Kan, S., phosphatide metabolism; effect of injection of haemolysed blood on phosphatide metabolism of spleen, blood-phosphatide in vena linalis and peripheral vessels, lipin-phosphorus in plasma and corpuscles, and lipin-phosphorus, -nitrogen, and -amino-nitrogen in spleen and liver, III, 753. Micro-determination of lipin-amino-nitrogen in dog's blood, III, 792. Phosphatide metabolism; effect of ultra-violet- and X-irradiation of spleen in dogs injected with haemolysed blood, III, 930.
- Kanaev, I., correlation between spontaneous, conditioned, and unconditioned salivary secretion in one pair of unioval twins, III, 309. Conditioned salivary reflexes in human twins, III, 309. Unconditioned salivary reflexes in human twins, III, 309. Spontaneous salivary secretion in human twins, III, 309.
- Kanamaru, K., and Takada, T., ζ -potential at interface solid/water in relation to micellar structure. I. and II. ζ -Potential of hydrate cellulose after conversion into cellulose, I, 113, 255. Electrokinetic potential of cellulose and its derivatives, I, 255. Surface conductivity. I. Surface conductivity of cellulose and its derivatives in relation to their lyophily, I, 255.
- Kanamaru, K., Takada, T., and Wada, E., electrokinetic investigations of the lyophilic properties of cellulose derivatives. V. Decrease in viscosity of cellulose nitrate, I, 213.
- Kanazawa, K. See Yaoi, H.
- Kanbayasi, O. See Sakaguchi, K.
- Kanda, Z. See Straub, W.
- Kandel, A. See Pearl, F. L.
- Kandilarov, G. G., sediment volumes and rate of sedimentation of multidisperse kaolin, quartz, and soil powders in electrolyte solutions. I. and II., I, 254, 294.
- Kane, A. P. See Wishnofsky, M.
- Kane, B. G., and Goeppert-Mayer, M., lattice summations for hexagonal close-packed crystals, I, 404.
- Kane, F. See Conway, E. J.
- Kane, S. S. See Kharasch, M. S.
- Kaneko, S., theory of diffusion, viscosity, and electrolytic conduction, I, 407.
- Kaneko, T. See Akabori, S.
- Kaniaev, N. See Schilov, E.
- Kanitz, H. R., non-specificity of Widmark's blood-alcohol method when applied to detection and behaviour of esters in blood, III, 630. Digestibility of oxidised soya oil (Palsgaard emulsion oil), III, 672.
- and Dammann, E., vitamin-C and growth index in guinea-pigs, III, 234. Protection of vitamin-C during boiling processes, III, 430.
- Kanner, L., infantile sexuality, III, 125.
- Kanner, M. H., and Barschall, H. H., distribution in energy of the fragments from uranium fission, I, 187.
- and Harris, W. T., search for β - and delayed γ -radiation from the deuteron-deuteron reaction, I, 3.
- Kanner, O., and Reed, G. J., polarographic study of insulin, III, 412.
- Kanngiesser, W. See Fischer, Hans.
- Kanning, E. W. See Hartman, R. J.
- Kannuliuk, W. G., [determination of] thermal conductivity of gases by a relative method with an application to deuterium, I, 271.
- Kano, T. See Simada, H.
- Kant, A., phenyldimethylethylammonium bromide, II, 303.
- Kantor, J. L., idiopathic steatorrhea, III, 742.
- Kantzer, M., absorption spectra of vapours in presence of a foreign gas, I, 55.
- Kanze, E. See Jervis, G. A.
- Kanzer, M. G. See Bender, M. B.
- Kanzler, M., validity of the Curie law for oxygen at high density, I, 103.
- Kao, T. Y., keto-cyclol tautomerism of α -diketones; α -dibromo- α -dibenzoyl-butane [β -dibromo- α -diketo- α -di-phenyl-n-hexane], II, 178.
- Kapadia, M. R. See Prasad, M.
- Kaplan, I., Cohn, D. J., Levinson, A., and Stern, B., sources of enzymes of normal and pathological cerebrospinal fluid, III, 487.
- See also Levinson, A.
- Kaplan, I. I., effect of irradiation on function of ovary in young girls, III, 125. Treatment of polycythemia vera with X-rays, III, 468. Irradiation with small doses in treatment of functional gynaecological conditions, III, 657.
- Kaplan, J., new afterglow phenomenon, I, 275.
- Kaplan, L. See Brams, W. A.
- Kaplan, L. G., and Katz, L. N., prognosis of intraventricular block, III, 290.
- Kaplan, M., and Low, A. A., glucose and insulin tolerance: relation to insulin shock treatment, III, 578.
- Kaplan, M. A. See Rubin, S. S.
- Kaplan, N. See Durfee, T.
- Kaplan, R., physicochemical structure of chromosomes, III, 778.
- Kaplash, B. N., Shaw, R. C., and Wheeler, T. S., condensation of chalkones with flavanones, II, 102.
- Kapnick, I. See Cope, O.
- Kapp, E. M., spectrography of urinary porphyrins, III, 667. Micro-determination of uronic acids, III, 779.
- Kapp, H., dietary regimes in hospitals, III, 229. Duodenal ulcer as industrial disease, III, 907.
- and Ilian, B., chronic gastritis and development of gastric cancer, III, 907.
- Kapp, R. See Buxton, L. O.
- Kappel, H. See Hüttig, G. F.
- Kappler, E., Brownian movement, I, 70.
- Kapur, P. L., does the mesotron obey Bose-Einstein or Fermi-Dirac statistics? I, 143.
- See also Bhatnagar, S. S.
- Kar, B. K., and Banerji, H. K., available substrates in developing fruit and their behaviour in storage, III, 872.
- Kar, K. C., interaction between radiation and matter, I, 143. Theory of Compton effect, I, 428.
- and Basu, D., proton-proton scattering, I, 144.
- Kara-Michailova, E., and Lea, D. E., ionisation measurements in gases at high pressures, I, 88.
- Karabin, J. E. See Anson, B. J.
- Karabinos, J. V. See Price, C. C.
- Karady, S., Browne, J. S. L., and Selye, H., effect of adrenal insufficiency on distribution of chlorides between plasma and erythrocytes, III, 125. Changes in chloride distribution between red blood cells and plasma during general adaptation syndrome, III, 288.
- See also Browne, J. S. L., and Rose, B.
- Karagunis, G., and Coumoulos, G., separation of optical antipodes; its importance for development of optical activity, I, 229.
- Kardos, L. See Gulliksen, D. P.
- Karelitz, S., and Weinstein, R. A., sulphapyridine in treatment of pneumonia, III, 598.
- Kargin, V. A., and Michailov, N. V., X-ray study of orientation of artificial fibre. I, 1, 71.
- Karjakin, J. V. See Tananaev, N. A.
- Karjala, S., and Link, K. P., synthesis of glycol glucosides, II, 206.
- Kark, R., and Lozner, E. L., nutritional deficiency of vitamin-K in man, III, 93.
- Lozner, E. L., and Meiklejohn, A. P., negative effect of synthetic vitamin-B₆ hydrochloride in nutritional deficiency in man, III, 514.
- and Souter, A. W., synthetic vitamin-K in hypoprothrombinemia, III, 790.
- See also Souter, A. W.
- Karkavy, J., tobacco skin reactions and their clinical significance, III, 255.
- Karlen, S. See Diamond, J. S.
- Karlik, B., limits of detection of heavy rare gases in helium, I, 231.

- Karlin, I. W., Youtz, A. C., and Kennedy, L., distorted speech in young children, III, 722.
- Karlsson, E. See Runnström, J.
- Karp, J., and Wolfsohn, G., metabolism of bromide in man, III, 241.
- Karpatshev, S., cathodic polarisation in electrolysis of molten salts, I, 28.
- Karpen, N. V., rôle of electrons in physicochemical phenomena. I. II. Attack of metals by acids, I, 119, 219, 227.
- Karpen, V., electron concentration cells and p_H measurement, I, 75. Gas cell; mechanism of electrolysis of water; polarisation of cells, I, 169. Attack of metals, I, 227.
- Karpovich, P. V., and Pestrecov, K., mechanical work and efficiency in swimming crawl and back strokes, III, 340.
- Karrasch, R. J. See Essenberg, J. M.
- Karrer, P., purity and activity of vitamin-A preparations, III, 50. Anti-hæmorrhagic vitamin-K, III, 916.
- and Epprecht, A. [with König, H.], general method of preparing 2-methyl-3-alkylnaphthoquinones; constitution and vitamin-K activity, II, 182.
- and Frank, H., *d*-amino-acid dehydrogenase, III, 931.
- and Geiger, A., α -tocopherolquinone, II, 230.
- Geiger, A., Legler, R., Rügger, A., and Salomon, H., isolation of α -phyloquinone (vitamin-K) from lucerne and the history of its discovery, III, 146.
- Geiger, A., Rügger, A., and Salomon, H., nor- α -phyloquinone (norvitamin-K₁) and similar compounds, II, 17.
- Jaeger, W., and Keller, H., determination of tocopherol in animal organs, III, 595.
- and Keller, H., determination of nicotinamide in animal organs, III, 52.
- and Koenig, H., carotenoids of purple bacteria. V. Rhodoviolascene, II, 228.
- and Rügger, A., synthesis of vitamin-A, II, 175. Crystalline β -dihydrocarotene, II, 338.
- See also Dam, H.
- Karschulin, M., behaviour of cathode-polarised iron in nitric acid, I, 258.
- See also Ehrensverd, G.
- Karshan, M., Rosebury, T., and Waugh, L. M., dental caries among Eskimos of Kuskokwim area of Alaska. II. Biochemical characteristics of stimulated saliva correlated with dental caries and occurrence of salivary calculus, III, 87.
- Siegel, E. H., Waugh, L. M., and Segal, M., saliva of Eskimos; correlation with dental caries and occurrence of salivary calculus, III, 745.
- See also Rosebury, T., and Siegel, E. H.
- Karstein, G. W., megalencephaly, III, 722.
- Karush, F. See Talbot, N. B.
- Karvé, D., and Gharpure, D. V., velocity of hydrolysis of aliphatic and aromatic nitriles, I, 166.
- and Mehendale, V. L., kinetics of reactions in heterogeneous systems. IV. Hydrolysis of benzyl acetate, butyl acetate, and isoamyl acetate by hydrochloric acid, I, 168.
- Karweil, J., and Schäfer, K., thermal conductivity of badly conducting alloys between 3° and 20° K., I, 156.
- See also Fresenius, W.
- Kashkai, M. A., demantoid from the ultrabasic rocks of Azerbaidjan, I, 46. Alunite from the Zaglik deposit (Transcaucasia), I, 180.
- Kashtanov, S. G. hydrogeological survey of valley of the river Viatka, I, 44.
- Kasiwabara, N. See Morigami, S.
- Kasperik, A. S. See Schoch, E. P.
- Kass, J. P., and Burr, G. O., ψ -elæostearic acid, II, 64. Linoleyl alcohol. II. Preparation, properties, and rearrangement, II, 296.
- and Keyser, L. S., preparation of pure stearic acid, II, 64.
- See also Burr, G. O., and Miller, E. S.
- Kassan, R. J., and Roe, J. H., preservation of ascorbic acid in drawn samples of blood, III, 561.
- Kassanis, B., intranuclear inclusions in virus-infected plants, III, 777.
- Kassell, B. See Brand, E.
- Kassner, E. W. See Coward, K. H.
- Kast, W., and Stuart, H. A., models of molecular structure of liquids, I, 148.
- Kastler, A., absorption of the yellow line of twilight spectrum by sodium vapour, I, 275.
- Kaszuba, F. J. See Musicant, L.
- Katagiri, H., and Murakami, Syosuke; optical properties of fermentation lactic acids. VIII. Optical specificities of phosphoglycerates decomposed by lactic acid bacteria. IX. Action of racemase on phosphoglycerates, III, 349.
- Katanskaja, G. A. See Smirnova, M. I.
- Kataoka, H. See Miyaki, K.
- Katchalski, E. See Frankel, M.
- Katik, I. S. See Nikolaev, V. I.
- Katô, H., quantitative separation of metals by hydrogen sulphide. III. Separation of zinc from iron by hydrogen sulphide, and the induced precipitation of ferrous sulphide by zinc sulphide. IV. Separation of copper from thallium by hydrogen sulphide, and induced precipitation of thallous sulphide by cupric sulphide. V. Separation of nickel, cobalt, and zinc from manganese. VI. Quantitative separation of iron from manganese by hydrogen sulphide. VII. Quantitative separation of zinc from chromium and separation of chromium from nickel, cobalt, and iron. VIII. Separating aluminium from iron, nickel, and cobalt. IX. Precipitating range of cadmium sulphide and separation of cadmium from zinc. X. Activity product and complete precipitation range of lead sulphide. XI. Activity product and complete precipitation range of bismuth sulphide. XII. Permanganimetric titration in alkaline solutions. I. Volumetric determination of formic acid, arsenious acid, manganese, and thallium. II. Direct titration of selenious and tellurous acids. III. Volumetric titration of formaldehyde and thiosulphate, I, 371. Induced precipitation in chemical analysis. I, I, 372.
- Kato, K., micro-prothrombin test with capillary whole blood: modification of Quick's quantitative method, III, 469. Use of combination micro-hæmopipette, III, 629.
- and Poncher, H. G., prothrombin in newborn, III, 558.
- See also Poncher, H. G.
- Kato, S. See Kino, K.
- Kato, T., histological investigations on human ligamentum nuchæ, III, 180.
- Katoh, M., combined action of two drugs with similar effects, III, 67. Effect of sympathol on pressor effect of adrenaline, III, 125.
- Katsampes, C., and Bradford, W. L., recovery from salmonella (Panama) meningitis in infant treated with sulphapyridine, III, 438.
- McGuinness, A. C., and Bradford, W. L., effect of hyperimmune human serum (lyophile) on humoral antibody titre in pertussis, III, 758.
- Katschenkov, S. See Fialkovskaja, O.
- Katschur, L. A. See Elovitsh, S. J.
- Katsura, H. See Kondo, H.
- Katsurai, T., and Fuda, M., inorganic gels prepared by trituration of hydrated solid salts, I, 212.
- Kattentidt, B., technique of blood sedimentation rate determination, III, 379.
- Katuki, S., and Sukegawa, H., temperature and humidity in various workshops of the textile industry in Japan. I. Characteristic features of the climatic conditions in various workshops. II. Comfort zone for workers in cotton mills, III, 256.
- Katuno, M., synthesis of diisopropyl ether. VII. Dehydration of isopropyl alcohol into isopropyl ether in the atmosphere of propylene under pressure, and supplementary experiments. X. Alcoholysis of diisopropyl sulphate with isopropyl alcohol, II, 114, 335. Synthesis of isopropyl alcohol from propylene. I.—III, II, 201.
- Katz, A. See Saland, G.
- Katz, B., electric excitation of nerve, III, 946.
- and Schmitt, O. H., electric interaction between two adjacent nerve fibres, III, 392.
- Katz, D. L., miscibility of carbon dioxide and water under high pressure, I, 353.
- and Kurata, F., retrograde condensation, I, 314.
- Katz, E., and Wassink, E. C., infra-red absorption spectra of chlorophyllous pigments in living cells and in extracellular states, III, 175.
- See also Wassink, E. C.
- Katz, G., histamine release from blood cells in anaphylaxis *in vitro*, III, 628.
- Frey, C. T., and Frey, L. I., action of ether on histamine release in anaphylaxis, III, 444.
- Katz, J. D. See Chesley, L. C.
- Katz, K., excretion of prolan in normal and cancerous subjects after prolan administration, III, 899.
- Katz, L. See Clark, A. L.
- Katz, L. N., and Friedberg, L., haemodynamic effect of 933 F. on trained unanesthetised normal and renal hypertensive dogs and its effect on pressor action of renin, III, 102.
- and Joehim, K., innervation of coronary vessels of dog, III, 99.
- and Lindner, E., quantitative relation between reactive hyperæmia and the myocardial ischæmia which it follows, III, 15. Reaction of coronary vessels to drugs, III, 333.
- and Rodbard, S., integration of the vasomotor responses in liver with those in other systematic vessels, III, 153.
- and Steinitz, F. S., pulmonary arterial pressure in experimental renal hypertension, III, 634.

- Katz, L. N. See also Bohning, A., Carlen, S. A., Friedman, M., Kaplan, L. G., Megibow, R. S., Rodbard, S., Sokolov, M., and Weinstein, W.
- Katz, M. L., and Solomoniuk, R. E., ultra-violet luminescence of sodium chloride crystals irradiated with X-rays at liquid air temperatures, I, 55.
- Katzenelbogen, S., Harms, H., Willmans, R., Barkoff, S., Brody, M. W., and Hayman, M., insulin treatment in schizophrenic patients, III, 23.
- Loucks, R. B., and Gantt, W. H., attempt to condition gastric secretion to histamine, III, 414.
- Katzenstein, K. H. See Abramson, D. I.
- Katzin, B. See Long, C. N. H.
- Katzman, P. A., Wade, N. J., and Doisy, E. A., progonadotropic sera of animals treated with hypophyseal extracts, III, 121.
- Katznelson, H., autolysis of a thermophilic *Actinomyces*, III, 538.
- See also Vandecaveye, S. C.
- Kauer, J. T. See Andrus, W. de W.
- Kauffman, B. P., hybrid sterility in *Drosophila*, III, 875.
- Kauffman, S. A., and Levinson, S. O., simplified method for scalp vein transfusions in infants, III, 17.
- Kauffmann, F., local allergy in man, III, 255.
- Kauffmann-Cosla, O., and Brull, R., action of zinc on absorption, III, 253.
- Kaufman, M. S. See Kotz, J.
- Kaufmann, A. R. See Bitter, F.
- Kaufmann, H. J., Lauder, W. B., and Kepner, R. K., pH of sodium dichromate solutions; dilution effects, I, 214.
- Kaufmann, O., and Thiessen, K., heredity of pernicious anaemia, III, 183.
- See also Windaus, A.
- Kaufmann, S. See Ruzicka, L.
- Kaufmann, W., occurrence of special cell groups at vascular pole of glomerulus in mammalian kidneys, III, 743.
- Kauko, Y., and Knappsberg, L., antimony electrode, I, 119.
- Kaulla, K. N. von, detoxication of digitoxin in white rat, III, 523.
- Kaump, D. H., and Greenwood, J. H., plasma-prothrombin determination, III, 789.
- and Parsons, J. C., extrarenal azotemia in gastro-intestinal hemorrhage. I. General and clinical consideration. II. Experimental observations, III, 907.
- Kaur, (Miss) G. See Bhatnagar, S. S.
- Kauschal, R., pyrones and related compounds. I. Formation and structure of 2:6-dihydroxy- γ -pyrone, II, 257.
- Kausche, G. A., relation between activity of virus protein and pH of medium, III, 544.
- and Holzapfel, L., specific activity of plant virus protein, III, 544.
- and Ruska, H., making visible the adsorption of colloidal metals on proteins. I. Reaction between colloidal gold and tobacco mosaic virus, I, 114. Structure of the "crystalline aggregates" of the protein of tobacco mosaic virus, III, 358.
- See also Borries, B. von, and Pfankuch, E.
- Kautsky, H., and Eberlein, R., chlorophyll fluorescence and assimilation of carbonic acid. VIII, III, 81.
- Kavanagh, F. See Robbins, W. J.
- Kavetski, N., carcinolytic property of serum in visceral diseases, III, 94.
- Kavetzki, N. S. See Skobetz, E. M.
- Kawahata, H. See Ishidate, M.
- Kawai, S., and Nobori, H., direct esterification of higher fatty acids with glycerol. I. Formation of mono- and di-glycerides, and their separation. II. Synthesis of monolaurin. III. Formation of mono- and di-stearin, II, 243, 336, 363.
- Kawakami, I. See Ogata, A.
- Kawakita, K., chemisorption of carbon dioxide by reduced iron. IV. Kinetics of chemisorption, I, 355.
- Kawanago, S., important cytologic-histologic findings in carcinoma of uterus, III, 509.
- Kawaoka, Y., rubber vulcanisation accelerators. VI. Mechanism of and methods for synthesis of thiolbenzthiazole from methyleneaniline, II, 316.
- Kawarada, M. See Chen, T. T.
- Kawasaki, T., hydrolysis of dicholesteryl ether by acid clay, II, 217.
- and Yamamura, Z., action of acid clay on sterols. VIII. Action of acid clay on cholesterol, II, 75.
- Kawase, K., and Anzo, S., [alkali-containing] earth. III. Water-soluble matter of alkaline earth distributed in Pinkiang province, I, 422.
- Kay, C. F., blood pressure in experimental nephritis produced by injection of nephrotoxic serum, III, 386.
- Kay, J. See Edwards, F. R.
- Kay, W. B., pressure-volume-temperature relations for *n*-butane, I, 202. Liquid-vapour equilibrium relations in binary systems; ethane-*n*-butane system, I, 215.
- Kayashima, S. See Ito, R.
- Kaye, G. W. C., protection of radiation worker, III, 529.
- Kaye, I. A., determination of minute amounts of potassium; iodometric evaluation of the cobaltinitrite precipitate, using ceric sulphate, I, 372. Determination of total and free cholesterol in serum, III, 706. Rapid method for isolation of kersin from Gaucher spleen, III, 881.
- Leibner, I. W., and Connor, E. B., apparatus for continuous drying and extraction of biological materials; application to extraction of neutral fat fraction of faeces, III, 274.
- See also Sobel, A. E.
- Kayser, C., respiratory exchanges of awakening hibernants. II. Respiratory quotient in poikilotherms, III, 712.
- See also Aron, M.
- Kayser, E. See Kütz, F.
- Kayser, M. E., determination of pH of human milk with alizarol, III, 226.
- Kayserling, H., and Soostmeyer, T., significance of renal lymphatics for renal function, III, 222.
- Kazama, T., sulphopeptidase. I. Isolation of renal peptidases by adsorption. II. Specificity of sulphopeptidase, III, 534. Hydrolysis of acyl radicals of polypeptides composed of glycine. I. and II, III, 534.
- Kazanski, B. A., preparation of diethyl cyclobutane-1:1-dicarboxylate by Kishner's method, II, 45.
- Plate, A. F., and Goldman, E. E., catalytic cyclisation of $\beta\zeta$ -dinethyloctane in presence of platinised charcoal, II, 265.
- Kazanski, B. A., and Tatevosjan, G. T., influence of the nature of the substituent on the velocity of catalytic hydrogenation of trisubstituted ethylenes in presence of palladium-black, I, 225. Influence of nature of the substituent on velocity of catalytic hydrogenation of tri-substituted ethylenes, in presence of platinum, II, 2. Catalytic hydrogenation of compounds having several double linkings. II. Hydrogenation of dimethylfulvene, II, 159.
- Kazanski, V. P. See Schestakov, V. E.
- Kazantzev, A. A., solubility of potassium dihydrogen phosphate in water, I, 67.
- Kazatschkova, S. V. See Raines, M. M.
- Kazeeva, E. V. See Krestinski, V. N.
- Keane, J. See Nolan, T. J.
- Keefer, C. S. See Rammelkamp, C. H., and Rantz, L. A.
- Keele, C. A., and Kwiatkowski, H. H., concentrated plasma in histamine shock, III, 705.
- Keeley, J. L., Durphy, J. E., Quigley, T. B., and Bell, J. F., successful autotransplantation of adrenal gland in dog, III, 727.
- Gibson, J. G., jun., and Pijoan, M., effect of thermal trauma on blood volume, serum-protein, and blood-electrolytes, III, 186.
- Keen, J. A., length of basilar membrane in man and various animals, III, 893.
- Keeney, E. L., adrenaline in oil: effectiveness in symptomatic treatment of bronchial asthma; effect in symptomatic treatment of hay fever, III, 306. Histaminase in hay fever, III, 863.
- Keers, W., colour of eyes, hair, and skin of population of Magarri, III, 625.
- Keesom, P. H. See Keesom, W. H.
- Keesom, W. H., "A-phenomenon" in helium, I, 434. Measurement of low temperatures, I, 446.
- and Keesom, P. H., viscosity of hydrogen vapour, I, 105.
- and Saris, B. F., heat conductivity of liquid helium. II, I, 202.
- and Walstra, W. K., isotherms of helium at liquid helium temperatures, I, 65.
- Keeton, R. W. See Spellberg, M. A.
- Kefford, J. F., attempted synthesis of papaverine, II, 344.
- Kegeles, G. See Åkerlöf, C.
- Kehe, R. A., Cholak, J., and Story, E. V., concentration of trace metals in biological materials, III, 910.
- Keiffer, M. H., histophysiology of human nipple, III, 809.
- Keil, A. See Steubing, W.
- Keil, J. H., functional spinal cord regeneration in adult rainbow-fish, III, 482.
- Keilin, D., and Hartree, E. F., mechanism of decomposition of hydrogen peroxide by catalase, I, 32. Decomposition of hydrogen peroxide by catalase, I, 122. Properties of cytochrome-c, III, 765.
- and Mann, T., properties of laccase from latex of lacquer trees, III, 462.
- and Mann, T. [with Smith, E. C. B.], purification and properties of carbonic anhydrase, III, 931.
- See also Mann, T.
- Keim, C. P., and Washburn, E. R., spreading of binary mixtures of volatile organic liquids on water, I, 438.
- See also Washburn, E. R.
- Keim, H. L., and Wakefield, R. F., flaccid paraplegia following diagnostic use of Frei antigen, III, 110.

- Keirs, R. J., and Englis, D. T., solution method for spectrographic analysis utilizing a dropping electrode, I, 373.
- Keiser, B., identification of β -aminoethanol, II, 264.
- Keith, A., fifty years ago, III, 621.
- Keith, A. J. See Diggs, L. W.
- Keith, H. M. See Penfield, W., and Petersen, J. N.
- Keith, J. D., and Brown, A., paroxysmal tachycardia, III, 632.
- Keith, M. L., selective staining [of minerals] to facilitate Rosiwal analysis, I, 85. Petrology of the alkaline intrusive at Blue Mountain, Ontario, I, 181.
- Keith, N. M., relationship of hypertension to renal disease, III, 793. See also Wagener, H. P.
- Keith, T. B. See Madison, L. C.
- Kekwick, A. See Bushby, S. R. M., and Marriott, H. L.
- Kekwick, R. A., observations at the electrophoretic moving boundary with Lamm's scale method, I, 114. Serum proteins in multiple myelomatosis, III, 882.
- Kelkar, G. R., and Limaye, D. B., influence of acyl group in position 3 on reactions of chromones. II. Action of aluminium chloride on 7-benzoyloxy-3-acetyl-2-methylchromone, II, 139.
- Kelkar, K. V., and Patankar, W. P., metamorphic rocks in the Southern Konkan, I, 379.
- Kelkar, V. V. See Newitt, D. M.
- Kell, R. C., and Matthews, R. A., true hermaphroditism, III, 366.
- Kellar, R. See Bishop, P. M. F.
- Kellaway, C. H., and Tretcheurie, E. R., tissue injury by volatile and gaseous anaesthetics, III, 251. Liberation of adenyly compounds from perfused organs by cobra venom, III, 604.
- Keller, A. See Abelin, I.
- Keller, A. D., hypoglycemia and increased insulin sensitivity following hypothalamic lesions, III, 393. Degeneration of infundibular nerve fibres without precipitating diabetes insipidus, III, 496.
- Keller, C., and Künzel, O., influence of p_H on surface tension of serum, III, 184.
- Keller, H. See Karrer, P.
- Keller, M. See Minot, A. S.
- Keller, T., experiences with Weltmann's serum coagulation in the University clinic in Zurich, III, 12.
- Keller, W. D., aurichalcite in Missouri, I, 379.
- Keller, W. N. See Larson, C. P.
- Kellermann, A., and Lange, E., adsorption of potential-determining ions. III. Adsorption of acids, neutral salts, and bases on highly activated carbon in absence and presence of hydrogen or oxygen, I, 356.
- Kellermann, E. W., theory of vibrations of sodium chloride lattice, I, 285.
- Kelley, D. McG., urinary bromides, III, 667.
- Kelley, J. J. See Jacobs, J. L.
- Kelley, K. K., specific heats at low temperatures of tantalum oxide and tantalum carbide, I, 248. Specific heat of tantalum at low temperatures and effect of small amounts of dissolved hydrogen, I, 248.
- Kelley, M. W. See Baxter, G. P.
- Keller, N. H., presbycusis; auditory loss with increasing age and its effect on perception of music and speech, III, 26.
- Kelley, O. R., and Bray, W. E., prothrombin time determination, III, 469. See also Bray, W. E.
- Kelley, V. C., Iceland spar in [Taos Co.] New Mexico, I, 380.
- Kellgren, J. H., painful joint conditions and their relation to osteoarthritis, III, 504.
- Kelling, D. See Werner, A. A.
- Kellman, L., primary polycythæmia with leukæmic manifestations, III, 91.
- Kellog, P. P. See Brand, A. R.
- Kellogg, J. M. B., Rabi, I. I., Ramsey, N. F., jun., and Zacharias, J. R., magnetic moments of the proton and the deuteron; radio-frequency spectrum of H_2 in various magnetic fields, I, 2. Electrical quadrupole moment of the deuteron; radiofrequency spectra of HD and D_2 molecules in a magnetic field, I, 275. and Ramsey, N. F., jun., magnetic moments of neon and argon, I, 336.
- Kelly, C. B., brilliant-green-lactose-bile and the standard methods completed test in isolation of coliform organisms, III, 935.
- Kelly, D. B., deafness and loss of vestibular function following herpes of scalp, III, 804.
- Kelly, J. A., gynæcologic cancer in children, III, 46.
- Kelsey, W. M., jun., and Anderson, D. H., congenital leukæmia, III, 704.
- Kelso, C. D. See Hurd, C. D.
- Kelso, L. E. A. See Hellebrandt, F. A.
- Kelso, R. E., 24-hour test (Aschheim-Zondek modification) for diagnosis of pregnancy, III, 581.
- Kelson, S. R., and White, P. D., sulphapyridine and heparin in subacute bacterial endocarditis, III, 243.
- Kelch, A. K. See Clowes, G. H. A., and Krah, M. E.
- Kemble, E. C., quantum-mechanical basis of statistical mechanics, I, 59. Fluctuations, thermodynamic equilibrium, and entropy, I, 64.
- Kemmer, N., the particle aspect of meson theory, I, 55.
- Kemmerer, A. R. See Fraps, G. S.
- Kemmerer, K. S., and Heil, G. P., serum-albumin changes in hypoproteinæmic dogs following administration of methionine or phenylalanine, III, 705. See also Mueller, A. J.
- Kemp, A. R., and Peters, H., mol. wt. of sol and gel in crude *Hevea* rubber, I, 25. and Straitiff, W. G., *Hevea* latex; effect of proteins and electrolytes on colloidal behaviour, III, 764.
- Kemp, E. J. See Oster, R. H.
- Kemp, F. H., venous thrombosis following injection of uroselectan B, III, 881.
- Kemp, W. N., iodine deficiency in relation to stillbirth problem, III, 307.
- Kempf, G. F. See Page, I. H.
- Kempf, J. E., and Soule, M. H., penetration of antiserum into central nervous system of monkeys infected with poliomyelitis, III, 113. Effect of chlorination of city water on virus of poliomyelitis, III, 937.
- Kempner, M. J. See Haterius, H. O.
- Kemula, W., limiting currents of electrolytes, I, 220. and Michalski, M., polarographic investigations: quantitative analysis of sodium and potassium, III, 620.
- Kench, J. E., determination of minute amounts of lead in urine, III, 852.
- Kendall, D., central pain, III, 120.
- Kendall, E. C., function of adrenal cortex, III, 807. See also Wells, B. B.
- Kendall, J., gas warfare, III, 865.
- Kendeigh, S. C. See Odum, E. P.
- Kendell, H. W. See Rose, D. L.
- Kendrick, A. B., and Hanke, M. E., effect of iodine and mercury on amino-nitrogen values with nitrous acid, II, 146.
- Kenel, C., arterial hypertension and field of vision, III, 203.
- Kennard, M. A., and Kessler, M. M., motor performance after parietal ablations in monkeys, III, 719.
- Schroeder, C. R., Trask, J. D., and Paul, J. R., cutaneous test for tuberculosis in primates, III, 77. See also Laidlaw, A. E., and Verhaart, W. J. C.
- Kennaway, E. L. See Cook, J. W.
- Kennaway, N. M. See Cook, J. W.
- Kennedy, F., the hypothalamus, III, 799.
- Kennedy, J. A. See Barcroft, J.
- Kennedy, J. W., and Seaborg, G. T., isotopic identification of induced radioactivity by bombardment of separated isotopes; 37-minute ^{37}Cl , I, 278. Seaborg, G. T., and Segrè, E., nuclear isomerism in zinc, I, 53. See also Seaborg, G. T.
- Kennedy, L. See Karlin, I. W.
- Kennedy, N. K. See Newman, H. W., and Winkle, W. van, jun.
- Kennedy, R. M. See Aston, J. G., and Messerly, G. H.
- Kennedy, S. R., jun., influence of magnesium deficiency, chlorophyll concentration, and heat-treatments on rate of photosynthesis of *Chlorella*, III, 871.
- Kennedy, T., nuclear methylation of phenol, II, 215.
- Kenny, C. L. See O'Brien, S. J.
- Kenny, M., and King, E., prolactin in nursing women, III, 28.
- Kensler, C. J., Sugiyama, K., and Rhoads, C. P., co-enzyme I and riboflavin content of livers of rats, III, 812.
- Kensler, G. T., immunology of toxic substances produced by streptococci isolated from equine encephalomyelitis, III, 690.
- Kent, A., McNeil, D., and Cowper, R. M., complexes of polynitro-compounds. III. Compounds of polynitro-substances with derivatives of carboxtyril, etc., II, 54.
- Kent, C. F., "false" positive Paul-Bunnell reaction [in leukæmia], III, 879.
- Kent, G. C., significance of epidermal concentric corpuscles: *Triturus*, III, 554. Complete unequal twin in teratomatous tumour of Belgian hare, III, 835.
- Kent, N. L., quantitative analysis of plant tissues for lithium, III, 831.
- Kenty, C., reversible clean-up effect in low-pressure mercury-vapour discharges, I, 382.
- Kenyon, A. T., Knowlton, K., Sandiford, I., Koch, F. C., and Lotwin, G., metabolic effects of testosterone propionate in normal men and women and in eunuchoidism, III, 644.
- Kenyon, J., and Young, D. P., racemisation of carboxylic esters by sodium ethoxide and Claisen's condensation, II, 118. See also Balfe, M. P., Collyer, T. A., and Duveen, D. I.
- Kenyon, W. O. See McDowell, W. H., and Murray, T. F., jun.

- Keogh, E. V., and Simmons, R. T., cultural methods as an aid in type differentiation of group A hemolytic streptococci, III, 265.
See also North, E. A.
- Képinov, L., excitatory action of vitamin-A and -E on secretion of the glycogenotropic hormone by the anterior pituitary, III, 320.
- Kepl, M., and Gunn, F. D., sulphanilamide and sulphapyridine in type III lobar pneumonia of rats, III, 59.
- Kepler, E. J. See Tooke, T. B., jun., and Wilson, D. M.
- Kepper, R. K. See Kaufmann, H. J.
- Kepp, F. V., fat absorption in patients with trans-duodenal feeding, III, 219.
- Keppel, D. M. See Du Vigneaud, V.
- Kerck, E. See Fredenhagen, K.
- Keresztesy, J. C. See Scudi, J. V., and Stiller, E. T.
- Kerley, C. G., end results in cretin, III, 845.
- Kerley, L. F. See Docking, A. R.
- Kerley, P., intrathoracic aneurysms, III, 886.
- Kerlogue, R. H. See Ives, D. J. G.
- Kerly, M., and Bourne, M. C., glycolysis in retinal extracts, III, 518.
- Kermack, W. O., and Tebrich, W., pyridine and piperazine derivatives of sulph-anilamide, II, 141. Attempts to find new antimalarials. XVI. Synthesis of derivatives of 4-carboline and 5:6-benz-4-carboline, II, 193.
and Weatherhead, (Miss) A. P., attempts to find new antimalarials. XVII. Derivatives of 5:6:3':2'-pyridoquinoline, II, 358.
See also Barclay, R. S.
- Kern, D. Q. See Othmer, D. F.
- Kern, R. A., rôle of water balance in clinical manifestations of allergy, III, 774.
- Kernan, T., capillary resistance in German measles, III, 884.
- Kernohan, J. W. See Lane, J. G.
- Kerr, A. S. See Schwartz, H. G.
- Kerr, D. E. See Helmer, D. E.
- Kerr, D. H. See Van Epps, C.
- Kerr, R. B. See Himsworth, H. P.
- Kerr, S. E. [with Seraidarian, K.], determination of purine nucleotides and nucleosides in blood and tissues, III, 369.
- Kerr, T., herring material [bodies] in perch pituitary, III, 576.
- Kerr, W. A., rapid spectrum line photometer, I, 330.
- Kerr, W. M. J. See Althausen, T. L.
- Kerridge, P. M. T., Briggs, G., Choyce, D. P., and Hill, J., defective hearing and nutrition in children, III, 27.
See also Gloyne, S. R.
- Kerschbaum, A., raw apple diet therapy of diarrhoea, III, 416.
- Kersten, H. See Branson, H.
- Kertesz, D. See Califano, L.
- Kertesz, Z. I. See Durfee, W. H.
- Kessler, M. M. See Kennard, M. A.
- Kestenbaum, A., associated ocular movements and gaze paralysis, III, 21.
- Kestenholz, K. See Fichter, P.
- Keston, A. S. See Chargaff, E., and Ratner, S.
- Keszler, M. See Wessel, F.
- Keszytis, L., and Martin, J., derivation and excretion of calcium in chorda saliva, III, 499.
- Ketchum, B. H., absorption of phosphate and nitrate by illuminated cultures of *Nitzschia closterium*, III, 451.
- Ketelaar, J. A. A., molecular structure of nitrosyl chloride, I, 151. Arrangement in mixed crystals, I, 155.
and De Vries, T. A., crystal structure of tetraphosphonitrile chloride, I, 100.
- Kettenmeyer, G. See La Barre, J.
- Ketteringham, R. C., glucose tolerance tests of newborn, III, 675.
- Keuth, H. See Schenck, R.
- Key, J. A. See Hench, P. S.
- Keyes, D. B. See Bonnell, W. S.
- Keyes, E. L., demonstration of nerve to levator glandulae thyroideae muscle, III, 833.
- Keys, A., rapid micro-Kjeldahl method, II, 145. Potassium exchanges in man in brief exercise, III, 605. Movements of human diaphragm during cardiac cycle in respiratory pause, III, 712.
and Friedell, H. L., measurement of stroke volume of human heart from röntgenograms; simultaneous röntgen-kymographic and acetylene-rebreathing experiments, III, 99.
and Violante, A., production of bradycardia in man by "neosynephrin" (β -methylamino- α -m-hydroxyphenylethanol hydrochloride), III, 759. Size and stroke of normal human heart during neosynephrin bradycardia, III, 840.
See also Taylor, H. L.
- Keys, T. E., and Willius, F. A., Malpighi's contribution to knowledge of circulation, III, 792.
- Keyser, L. S. See Kass, J. P., and Shriner, R. L.
- Kezur, E. See Tashiro, S.
- Khairat, O., effect of carbon dioxide atmosphere on blood cultures [of bacteria], III, 687.
- Khan, A. Q. See Siddiqui, R. H.
- Kharasch, M. S., and Brown, Herbert C., chlorinations with sulphuryl chloride. II. Peroxide-catalysed reaction of sulphuryl chloride with ethylenic compounds. III. Peroxide-catalysed chlorination of aliphatic acids and acid chlorides; photochemical sulphonation of aliphatic acids, II, 72, 202. Photochemical inter-reactions of oxalyl chloride and phosgene with cyclohexane, II, 172.
- Chao, T. H., and Brown, Herbert C., sulphonation reactions with sulphuryl chloride. I. Photochemical sulphonation of aliphatic acids with sulphuryl chloride, II, 363.
- Haeefe, W. R., and Mayo, F. R., peroxide effect in addition of reagents to unsaturated compounds. XXV. Effect of metals on addition of hydrogen bromide to allyl bromide, II, 362.
- Kane, S. S., and Brown, Herbert C., presence of indole in "practical" α -methylnaphthalene, II, 369.
- Norton, J. A., and Mayo, F. R., peroxide effect in the addition of reagents to unsaturated compounds. XXIV. Addition of hydrogen iodide to propylene, α -bromopropylene, allyl chloride, and allyl bromide, II, 61.
- Nudenberg, W., and Sternfeld, E., synthesis of polyenes. II. Reactions of β -methylallyl chloride with sodamide in liquid ammonia, II, 362.
- and Priestley, H. M., addition of N-halo-genamides to olefines, II, 75.
- Kharasch, M. S., and Reid, (Miss) A. T., sulphonation reactions with sulphuryl chloride, II, 3.
- Richlin, I., and Mayo, F. R., condensation of butaldehyde and aniline, II, 163.
- Schenck, R. T. E., and Mayo, F. R., peroxide effect in the addition of reagents to unsaturated compounds. XXIII. Reaction of styrene with hydrogen sulphites, II, 9.
- and Sternfeld, E., factors influencing polysulphone formation, II, 363.
- Sternfeld, E., and Mayo, F. R., reaction of sodium in liquid ammonia with esters, II, 322.
See also Walling, C.
- Khastgir, S. R., and Rahman, F., dielectric constant and electrical conductivity of gases and vapours ionised by X-rays at ultra-high radio frequency, I, 244.
and Sirajuddin, K., dielectric constant of space containing electrons, I, 2.
See also Rahman, F.
- Kibler, C. J. See Lutz, R. E.
- Kibota, K. See Hanafusa, S.
- Kibrick, A. C. See Greenwald, I.
- Kicksch, L. See Istrati, G.
- Kidani, Y., photo-elastic property of rock-salt crystals, I, 288.
- Kidd, F., and West, C., formation of "fructose" units during starch hydrolysis in later stages of growth of apples, III, 615.
- West, C., Griffiths, D. G., and Potter, N. A., changes in chemical composition and respiration during ripening and storage of Conference pears, III, 363.
- Kidd, J. G., distinctive substance associated with Brown-Pearce rabbit carcinoma. I. Presence and specificity of substance as determined by serum reactions. II. Properties of the substance, III, 507.
- and Rous, P., cancers deriving from virus papillomas of wild rabbits under natural conditions, III, 747. Transplantable rabbit carcinoma originating in virus-induced papilloma and containing virus in masked or altered form, III, 912.
See also Rous, P.
- Kidd, T. G., masking effect of extravasated antibody on rabbit papilloma virus C, Shope, III, 228.
- Kiehl, S. J. See Lanford, O. E.
- Kiehle, F. A., and Darnell, C. A., reduplication of Descemet's membrane, III, 203.
- Kiene, H. E., Streitwieser, R. J., and Miller, H., vitamin-B₁ and delirium tremens, III, 801.
- Kienitz, H. See Meyer, Julius.
- Kienle, F., electrocardiographic signs of insufficiency of right coronary artery, III, 191. Coronary insufficiency of right ventricle in anemia, III, 191.
- Kienle, R. H., and Petke, F. E., polyhydric alcohol-polybasic acid reaction. V. Glyceryl succinate and maleate polyesters, II, 266.
See also Crossley, M. L.
- Kiese, M., and Hastings, A. B., catalytic hydration of carbon dioxide, I, 167. Factors affecting activity of carbonic anhydrase, III, 260.
- Kiess, C. C., infra-red arc spectrum of germanium, I, 183.

- Kiessig, H., and Philippoff, W., X-ray and viscosity investigations of effect of foreign substances on structure of sodium oleate solutions, I, 112.
See also Hess, K.
- Kihara, K., maltol from products of hydrolysis of protein matters with hydrochloric acid, II, 317. Removal of melanin from amino-acid solutions, III, 548.
- Kik, M. C., nutritive value of proteins of rice and its by-products. II. Effect of amino-acid additions on growth, III, 817.
- Kikuth, W., and Mudrow, L., chemotherapy of piroplasmosis of dogs (*B. canis*), III, 332.
- Kilborn, L. G., choline and liver-fat in birds, III, 220.
- Kilduffe, R. A., stability of glycerinated antisheep hemolysin, III, 379.
and Davis, D. B., Boerner-Lukens complement-fixation test, III, 869.
- Kilgour, J. M., treatment of pneumococcal pneumonia with sulphapyridine, III, 243.
- Kilham, L. See Bennett, H. S.
- Killick, E. M., carbon monoxide anoxæmia, III, 712.
Cowell, E. M., and Crowden, G. P., principles of artificial respiration, III, 105.
- Killingsworth, W. P., and Hibbs, W. G., agenesis of lung, III, 622.
- Kilmer, G. W. See Fieser, L. F.
- Kilpatrick, M., kinetics of neutralisation, I, 326. Locknut for a weight burette, I, 446.
and Barr, E. A., jun., Grignard reagent, II, 368.
See also Gzemska, F. C.
- Kilpatrick, M. L., errors in determination of dissociation constant of a weak acid by the extrapolation method, I, 294.
- Kilvington, T. B. See Krieger, V. I.
- Kim, C. H., fate of cholic acid in the guinea-pig, III, 328. Bile acids of tortoises; trihydroxysterchocholic acid lactone, III, 666. Esterase of yeast, III, 685.
See also Yamasaki, Kazumi.
- Kim, S. See Kondo, K.
- Kimball, D. C. See Cole, W. C.
- Kimball, G. E., directed valency, I, 198. Absolute rates of heterogeneous reactions. II. Electrode reactions, I, 223.
- Kimball, O. P., and Horan, T. N., use of dilantin in treatment of epilepsy, III, 441.
- Kimberly, L. W., plasma-bromide levels in bromoderma, III, 527.
- Kime, H. B. See Caldwell, W. T.
- Kimmel, C. B. See Bartels, E. C.
- Kimmelstiel, P., and Easley, C. A., experimental botryomycosis, III, 585.
- Kimura, K. See Nishina, Y.
- Kimura, W., and Tsurugi, J., arylation of oils and fats. III. Synthesis of tolylstearic acid, methyl tolylstearate, and tolylstearo-*p*-xenylamide, II, 129.
- Kimura, Y. See Tsuzuki, Y.
- Kin, H., effect of vitamin-B₁, panax extract, and histotoxin on chronic nicotine poisoning, III, 928.
- Kin, L. C., optical study and synthesis of unsymmetrical phthaleins and their derivatives, II, 220.
- Kinard, F. W., and Van de Erve, J., rat mortality following sodium tungstate injection, III, 603.
See also Aull, J. C.
- Kincaid, J. F., and Henriques, F. C., jun., stability towards racemisation of optically active compounds, with special reference to trivalent nitrogen compounds, I, 347.
and Tarbell, D. S., Claisen rearrangement. I. Kinetic study of the arrangement of *p*-tolyl allyl ether in diphenyl ether solution, I, 30.
See also Tarbell, D. S.
- Kinder, W., estimations of metabolism with Zeiss interferometer, III, 859.
- Kindschi, L. G., chronic ulcerative colitis with marked deficiency state, III, 812.
- King, Alexander, and Mukherjee, L. N., stability of emulsions. II. Emulsions stabilised by hydrophilic colloids, I, 410.
See also Bennister, H. L., Chambers, H. H., Cheesman, D. F., and Harbard, E. H.
- King, Allen, measuring Young's modulus, I, 273.
- King, B. G. See Koletzky, S.
- King, C. G., Musulin, R. R., and Swanson, W. F., effects of vitamin-C intake on degree of tooth injury produced by diphtheria toxin, III, 915.
See also Daubert, B. F., Harrer, C. J., Longenecker, H. E., and Schultze, M. O.
- King, C. V., catalytic decomposition of azodicarbonate ion, I, 224.
- King, E. See Kenny, M.
- King, E. J., and Delory, G. E., carbonate-veronal buffer solution covering p_H 7.5 to 10.7, I, 272.
- King, E. L., and Herring, J. S., hypothyroidism and abortion, III, 208.
- King, F. H., and Sohval, A. R., relative value of basal metabolic rate, velocity of blood flow, and creatine tolerance test in differential diagnosis of Graves' disease and allied conditions, III, 407.
- King, Harold, curare alkaloids. V. Alkaloids of *Chondrodendron* species and the origin of radix pareire bravæ, II, 294.
and Hamilton, C. M., pemphigus controlled by vitamin-D, III, 54.
and Work, T. S., antiplasmodial action and chemical constitution. III. Carbinolamines derived from naphthalene and quinoline, II, 356.
- King, J. C. See Davis, D. B.
- King, J. D., abnormalities in gingival and sub-gingival tissues due to dietary vitamin-A and carotene deficiency, III, 592.
- King, J. F., and Priest, H. F., filtering apparatus, I, 378.
- King, J. T., and Henschel, A. F., bacteriostatic effect of sulphathiazole and sulphamethylthiazole for β -hemolytic streptococci in tissue culture clots, III, 757.
Henschel, A. F., and Green, B. S., bacteriostatic and antitoxic actions of sulphanilamide, III, 245.
- King, L. C., and Ball, C. D., jun., sterols of lucerne seed oil. I, III, 83.
- King, L. D. P., and Henderson, W. J., radioactive isotopes of indium from α -bombardment of silver, I, 53.
See also Henderson, W. J.
- King, L. S., neurotropic viruses, III, 267. Encephalopathy following injections of bone-marrow extract, III, 374. Properties of encephalopathic agent in primate bone marrow (Gordon agent), III, 837.
- King, R. B. See Russell, H. N.
- King, R. L., and Beams, H. W., comparison of effects of colchicine on division in protozoa and other cells, III, 626.
See also Beams, H. W.
- King, W. L. M., evaluation of combined effects of sulphapyridine and barbiturates in treatment of pneumonia, III, 861.
- Kingdon, K. H., Pollock, H. C., Booth, E. T., and Dunning, J. R., fission of separated uranium isotopes, I, 278.
- Kingisepp, G., and Talli, L., percutaneous insulin absorption, III, 578.
- Kingsbury, A. W. G., new British locality for fluorite in Somerset, I, 136. Occurrence of bismuthinite in Somerset, I, 238.
and Friend, J. N., occurrence of greenockite in the Mendips, I, 136.
- Kingsbury, B. F., question of lateral thyroid in mammals with special reference to man, III, 372.
and Roemer, F. J., development of hypophysis of dog, III, 622.
- Kingsland, L. C. See Shaw, D. T.
- Kingsley, G. R., determination of serum-total protein, -albumin, and -globulin by the biuret reaction, III, 96. Separation of serum-albumin and -globulin, III, 619.
- Kinney, C. R., calculations of the b.p. numbers of aliphatic compounds, I, 16. Calculation of b.p. of aliphatic hydrocarbons, I, 247.
- Kinney, G. F., barometric correction nomograph for hydrogen electrode, I, 41.
- Kino, K., and Kato, S., preparation of a higher secondary alcohol from a higher ketone by hydrogenation under pressures of 5 and 20 atmospheres, II, 67. Hydrogenation of a higher ketone with catalysts consisting mainly of copper, cobalt, and cerium under atmospheric pressure, II, 67.
- Kinosita, H. See Kamada, T.
- Kinosita, R., cancerogenic azo- and related compounds, III, 588. Changes in the liver of the rat caused by 4-dimethylaminobenzene-1-azonaphthalene, etc., III, 669.
- Kinsey, H. I., Brown, W. H., and Feasby, W. R., antipneumococcus serum treatment of pneumonia, III, 678.
See also Detweiler, H. K.
- Kinsey, V. E., sodium pentobarbital and repeated anaesthesia in rabbits, III, 862. Sodium pentobarbital for repeated anaesthesia in guinea-pigs, III, 925. Use of sodium pentobarbital for repeated anaesthesia in rats, III, 925.
- Kinzer, G. D. See Almy, G. M.
- Kinzerskaja, K. N., phenylisoamyl [γ -phenyl- $\alpha\alpha$ -dimethylpropyl]acetate, II, 276.
- Kip, A. F., positive-point to plane discharge in air at atmospheric pressure, I, 306.
- Kip, M. J. T. See Bok, S. T.
- Kiplinger, D. C. See Childers, N. F.
- Kipp, P. J., contraction and structure in a muscle of *Metridium senile*, L., III, 568.
- Kippen, J. W. See MacCharles, M. R.
- Kipping, F. B., and Wild, F., interaction of β -ionone with halides in presence of lithium, and a synthesis of 1:6-dimethylnaphthalene, II, 343.
- Kiprianov, G. I., and Frenkel, B. E., oxidation of cholesteryl acetate dibromide to *trans*-dehydroandrosterone, and conversion of the latter into methyltestosterone, II, 180.

- Kirby, G. F., jun. See Choppin, A. R.
 Kirby-Smith, H. See Simpson, C. A.
 Kirby-Smith, J. S., and Bonner, L. G., Raman spectra of gaseous substances. I. Apparatus and the spectrum of methylamine, I, 9.
 Kircher, F. See Klages, F.
 Kircher, T. E., jun. See Edwards, J. C.
 Kirchheimer, E., comparative biochemical study of *Spherophorus necrophorus* and *S. funduliformis*, III, 262. Comparative biochemical and immunological study of *Spherophorus necrophorus* and *S. funduliformis*, III, 356.
 Kirchner, E. See Alexander, H. L.
 Kirchner, J. G., and Johns, I. B., electron-sharing ability of organic radicals. XI. 2-Thienyl- and 2-mesityl-pyrrolidines, II, 359.
 Kirchner, W., hypovitaminosis in pregnancy, III, 231. Intravenous anaesthesia in obstetrics, III, 441. Intravenous anaesthesia in gynaecology, III, 525.
 Kirimilidis, S. See Malyoth, G.
 Kirino, K., pharmacological action of coriamyrtin and its derivatives, III, 926.
 Kiriuschov, P. J. See Levina, R. J.
 Kirjalov, N. P., acids of the latex of *Euphorbia biglandulosa*, Desf. III, 111, 618.
 Kirk, E., water and salt metabolism under normal and pathological conditions, III, 242.
 Kirk, P. L., and Bennett, C., syphilis testing with finger blood, III, 76.
 Kirk, R., and Sati, M. H., skin and lymph glands in kala-azar, III, 610.
 See also Horgan, E. S.
 Kirklin, B. R., and Seedorf, E. E., reaction following employment of pitressin in cholecystography, III, 502.
 Kirkpatrick, J., and Lendrum, A. C., mounting medium for microscopical preparations giving good preservation of colour, III, 374.
 Kirkpatrick, W. J. See Frazer, J. H.
 Kirkwood, J. G., dielectric polarisation of polar liquids, I, 10. Molecular distribution in liquids, I, 11. Hole theory of condensation, I, 18. Phase changes in crystals arising from hindered molecular rotation, I, 198. Statistical mechanics of co-operative phenomena, I, 400.
 Kirret, O. See Simon, A.
 Kirrmann, A., and Laurent, P., Raman effect: characteristic frequency of double linking of imines, I, 96.
 Kirsch, E. See Notkin, L. J.
 Kirsch, S. C. See Weber, A. H.
 Kirschbaum, A., Gardner, W. U., Nahigian, R., and Strong, L. C., differentiation between sacromatous and leukæmic lymphocytes in mice, III, 879.
 Pfeiffer, C. A., Van Heuverswyn, J., and Gardner, W. U., gonad-hypophyseal relationship and cyclic osseous changes in the English sparrow, *Passer domesticus*, L., III, 579.
 and Strong, L. C., leukemia in *F* strain of mice: observations on cytology, general morphology, and transmission, III, 226.
 See also Gardner, W. U., and Stern, K. G.
 Kirschbaum, J. D., and Popper, H., toxic hepatitis, III, 502.
 Kirshenblit, H. W. See Beams, H. W.
 Kirsner, J. B., and Bryant, J. E., calcium content of gastric juice, III, 309.
 Kirsner, J. B., Nutter, P. B., and Palmer, W. L., hydrogen-ion concentration of gastric secretion, gastroscopic appearance of gastric mucosa, and presence of gastric secretory depressant in patients with anacidity, III, 740.
 and Palmer, W. L., effect of antacids on pH of gastric contents, III, 584.
 See also Dack, G. M., Levine, R., and Schindler, R.
 Kirstein, M. B., and Bromberg, L., effect of fever therapy on carbohydrate metabolism, III, 67.
 Kirtisinghe, P., myenteric nerve plexus in lower chordates, III, 554.
 Kirtley, J. A., jun. See Haggard, W. D.
 Kirtton, H. M. See Clow, A.
 Kirtz, M. M. See Wolfe, J. M.
 Kirvaldize, I. D., determining the charging potential of dielectrics and lower limit of secondary electron emission from a monocrystal of NaCl, I, 312.
 Kiselev, A. V. See Iljin, B. V.
 Kishi, S., Fujiwara, T., and Nakahara, W., comparison of chemical composition between hepatoma and normal liver tissues. VIII. Lipins, III, 46.
 and Nakahara, W., provitamin-D in experimentally produced rat hepatoma, III, 912.
 Kishida, S., new *Salmonella* type (*S. onarimon*), III, 541.
 Kisliakov, I. P., preparation of iron, copper, and nickel in powder form by reduction of oxides with hydrogen, I, 266.
 Kiss, A. von, and Bossányi, I., mechanism of the reaction of monobromoacetate and hydroxyl ions, I, 30.
 and Kukai, R., mechanism of the reaction of $[\alpha]$ -lactoxypionate and hydroxyl ions, I, 31.
 Kiss, P. von, permanent heart block in diphtheria, III, 884. Para-arrhythmia in scarlet fever, III, 884.
 and Martyn, R., heart block in scarlet fever, III, 884.
 and Romhányi, J., extrasystoles in scarlet fever, III, 884.
 Kissinger, L. W. See Miller, E., and Sprague, J. M.
 Kistiakowsky, G. B., and Rice, W. W., gaseous heat capacities. II. and III, I, 405.
 See also Conn, J. B.
 Kitaer, E. J. See Burkser, E. S.
 Kitaeva, O. N., breed determined differences in blood indices of fowls, III, 375.
 Kitagawa, S., action of adrenaline, acetylcholine, and pilocarpine on animals previously treated with manganese, III, 928.
 Kitaigorodski, A., interference curves on X-ray rotation photographs, I, 12.
 Kitamura, K. See Ito, G.
 Kitamura, S. See Maki, T.
 Kitasato, Z. [with Sinkai, M.], constitution of acid sapogenins. XV. Hederagenin and oleanolic acid, II, 89.
 Kitayama, T. See Omoti, S.
 Kitchel, J. H. See Hulpieu, H. R.
 Kitchener, (Lord), measurements of the velocity of light, I, 55.
 Kitching, J. A., activity of protozoa at low oxygen tensions, III, 105.
 and Firenne, M. H., influence of low tensions of oxygen on protoplasmic streaming of myxomycetes, III, 843.
 and Pease, D. C., liquefaction of tentacles of suctorian protozoa at high hydrostatic pressure, III, 226.
 Kitching, J. S. See Farrekk, L. N.
 Kitimura, R., and Sunagawa, G., constitution of antipyrine and related compounds. VII. Complex bromine addition compounds of antipyrine. I. Knorr's dibromide. VIII. II. A. Sonn and W. Littler's antipyrine perbromide and T. Komata's four bromides, II, 331.
 Kittel, C., and Breit, G., scattering of neutrons by protons, I, 5.
 See also Breit, G.
 Kiun-Houo, O., β -ethylenic alcohols, II, 148.
 Kiyama, R., decomposition of ammonia by iron catalyst mixed with Al_2O_3 and K_2O , I, 169.
 Kiyomizu, S., magnetic shaking device, I, 273.
 Kizber, A. I., synthesis of aromatic amino-carboxylic acids, II, 86.
 Kizel, A., Efimotschkina, E., and Rall, J., relation between asymmetry of the organism and optical activity of its components. I. Amino-acids of conchiolin of shells with right and left direction of whorls, III, 505.
 Klages, F., and Kircher, F., mannans. V. Question of the existence of a mannohiase in barley malt, III, 535.
 Kircher, F., and Fessler, J., abnormal osmotic effects with chain molecules. II. Synthesis and cryoscopic behaviour of polydesides, II, 45.
 Klages, G. See Fischer, E.
 Klainer, M. J. See Davies, D.
 Klainer, M. L., prognostic significance of right axis deviation in arteriosclerotic and hypertensive heart disease, III, 710.
 Klare, E., hormonal action of ovum, III, 904.
 Klarfeld, B., ionisation in the positive column, I, 2. Positive column in potassium vapour, I, 183.
 Klass, R., preparation of colloidal gold solution, III, 619.
 Klassen, K. P., Bierbaum, R. L., and Curtis, G. M., comparative iodine content of blood and cerebrospinal fluid, III, 395.
 Klatt, T. See Rusch, H. P.
 Klatt, W., ebullioscopic investigations on solutions of azides and cyanides in hydrogen fluoride, I, 163.
 Klauder, J. V., Gross, E. R., and Brown, Herman, prevention of industrial dermatitis: protective hand creams, soap, and harmful rôle of some cleansing agents, III, 445.
 Gross, E. R., and Robertson, H. F., clinical and experimental study of interstitial keratitis, III, 25.
 Klauer, H., and Specht, W., succinic acid in toxicological analysis, III, 156.
 Klebanov, G. S., and Basova, E. P., solubility in the systems $NaBr-NaBrO_3-H_2O-NaHCO_3$ and $-Na_2CO_3$, I, 251.
 Kleber, W., theory of accessory formation [in crystals], I, 431.
 Kleczkowska, J., Norman, A. G., and Śniezsko, S. F., bacteriological studies on a new capsulated bacillus, *Bac. krzemieniowski*, III, 868.
 Kleczkowski, A., quantitative investigation of precipitin reactions of proteins treated with phenylcarbimide and formaldehyde, III, 456. Changes in antigenic properties in course of iodination of horse-serum globulin, III, 614.
 and Wierzchowski, P., chemical nature and properties of the polysaccharide produced by *Bac. krzemieniowski*, nov. sp., III, 868.

- Kleeberg, J., Gurevitch, I., and Alkan, W. J., sulphanilamide therapy in undulant fever and new method of blood culture, III, 438.
- Kleeberg, T., acute severe gastro-enteritis as problem of circulation and permeability, III, 907.
- Kleefeld, G., slit-lamp illumination by krypton-filled lamps (for examination with polarising filters), III, 489.
- Kleiber, M., Boelter, M. D. D., and Greenberg, D. M., fasting catabolism and food utilisation of calcium-deficient rats, III, 913.
- Klein, A. See Borsche, W.
- Klein, A. J., and Palmer, W. L., experimental gastric carcinoma, III, 670.
- Klein, B. See Zuckerman, I. C.
- Klein, C. See Saland, G.
- Klein, D., determination of acetone and acetoacetic acid in blood by the bisulphite-binding method and its relation to pyruvic acid, III, 840.
- Klein, E. K., spasmolytic action of dolantin, III, 249.
- Klein, F., action of prolactin on guinea-pig's thymus irradiated with X-rays, III, 406.
- and Ligterink, J. A., insulin and cerebral damage, III, 720.
- Klein, H., and Palmer, C. E., community economic status and dental problem of school children, III, 466.
- Klein, I., microcline in native copper deposits of Michigan, I, 85.
- Klein, J. R., increase in activity of *d*-amino acid oxidase of rat liver produced by thyroid feeding, III, 161. Oxidation of *l*(-)-aspartic and *l*(+)-glutamic acids by *Haemophilus parainfluenzae*; preparation of pyridine nucleotides from bakers' yeast, III, 770.
- See also Kohn, H. I.
- Klein, L. See Wilkinson, J. F.
- Klein, P. See Suhrmann, R.
- Klein, R. See Friedman, M.
- Klein, R. I., Levinson, S. A., and Rosenblum, P., Weltmann reaction [coagulation band] and sedimentation rate during rheumatic fever of childhood, III, 629.
- Klein, W., Schmid, H., Studt, E., and Müller, R., value as structural units of bacterial protein produced from non-protein compounds in the rumen, based on the established physiological protein minimum; bacterial action in the rumen and its importance for deficiency phenomena, V, III, 856.
- Kleinberg, W., Gordon, A. S., and Charipper, H. A., effect of cobalt on erythropoiesis in anemic rabbits, III, 89.
- See also Gordon, A. S., and Schweizer, M.
- Kleiner, I. S., relative effects of progesterone and testosterone propionate on ovipositor lengthening of female bitterling, III, 651.
- Kleinholz, L. H., and Rahn, H., distribution of intermediates: new biological method of assay and results of tests under normal and experimental conditions, III, 732.
- Kleinschmidt, H., hereditary and constitutional anemia in children, III, 181.
- Kleinzeller, A., effect of electrolytes on respiration of pigeon breast-muscle, III, 859.
- See also Krebs, H. A., and Werner, H.
- Klemenc, A., electrolytic processes at the anode as reactions of hydroxyl, I, 78.
- See also Heinrich, G.
- Klemka, A. J. See Norris, J. F.
- Klemm, K. See Friedman, L.
- Klemm, O. See Meyer, K. H.
- Klemm, W., chalcogenides of vanadium and their relations to the chalcogenides of the other transition elements, I, 150.
- Ferromagnetism, antiferromagnetism, and particle size, I, 311.
- and Grimm, L., heat tonality of the "paramagnetic Curie temperature" of vanadium dioxide, I, 104.
- See also Böhm, B., Senff, H., and Teichert, W.
- Klemme, C. J., and Hunter, J. H., synthesis of iodohippuric acids. I. 2:5-, 3:5-, and 3:4-Di-iodohippuric acids. II. 2:3:5- and 3:4:5-Tri-iodohippuric acid, II, 277, 373.
- and Worrell, L., determination of peptic activity, III, 759.
- Klemperer, F. W. See Van Slyke, D. D.
- Klemperer, W. W., recovery from pneumococcal meningitis; [use of sulphapyridine], III, 243.
- Klempner, E., Frank, R. T., and Hollander, F., improvement in chick comb response to androsterone obtained with alcohol as vehicle, III, 848.
- Hollander, F., and Frank, R. T., relation between volume of vehicle and chick comb response to androsterone, III, 848.
- Kletzien, S. W. [with Buchwald, K. W., and Hudson, L.], iron metabolism. I. Role of calcium in iron assimilation, III, 519.
- Kleyntjens, F. See Bremer, F.
- Kliatschko, V. R., effect of adrenal cortex on sexual apparatus. I. Gonadotropic action of adrenal cortex of cattle, III, 125.
- Kligler, I. J., and Bernkopf, H., cultivation of rabies virus in the developing chick embryo, III, 78.
- Klimenkov, V. See Medvedev, S.
- Klimova, V. A. See Jakubovitch, A. J.
- Kline, B. E. See Baumann, C. A., and Ruseh, H. P.
- Kline, E. M. See Johnston, F. D.
- Kline, R. F. See Britton, S. W.
- Kling, C., Olin, G., Magnusson, J. H., and Gard, S., excretion of virus of poliomyelitis in faeces, III, 357.
- Klingensmith, C. W., and Evans, W. L., preparation of *d*- and *l*-ribosidodihydroxyacetone tetra-acetates with an ortho-ester structure, II, 6.
- Klinger, F. E., gold deposits of British Gold Coast (West Africa), I, 334.
- Klingman, W. O. See Day, R.
- Klingmann, T., mechanism of psychoneuroses, III, 395.
- Klioner, I. L., senile changes in bony and cartilaginous apparatus of joints, III, 463.
- Klisiecki, A., and Niedbal, M., significance of static-elastic forces of the thorax for respiratory movements, III, 17.
- Kljatschko, V. R., gonadotropic action of adrenal cortex of man, III, 411.
- Klobusitzky, D. von, production of therapeutic snake venom anti-toxins, III, 339.
- Increased coagulability and anti-coagulant action of *Bothrops jararaca* venom, III, 558.
- Kloetzel, M. C., polymethyl aromatic hydrocarbons. I. Synthesis of 1:2:4-tri-, 1:2-, 1:3-, and 1:4-di-methylnaphthalene, III, 302.
- Klose, A. A., and Almquist, H. J., synthesis of vitamin-K₁, III, 325. Citrulline to replace arginine in diet of the chick, III, 860.
- See also Almquist, H. J.
- Klostermeyer, W., early diagnosis of thrombo-angitis obliterans and arteriography with ethyl tri-iodostearate, III, 885.
- Klotschko, M. A. See Kurnakov, N. S.
- Klotz, L. J., uniformity in differential enumeration of leucocytes, III, 376.
- Klotz, R., glutathione in heart failure, III, 474.
- Kluchar, G. V., Barnett, C. W., and Card, J. F., iodoibimitol with saligenin in treatment of neurosyphilis, III, 863.
- Klug, H. P., and Alexander, Leroy, crystal chemical studies of the alums. I. Solid solutions of potassium aluminium and ammonium aluminium alum, I, 349.
- Kluge, H., specific method for determination of blood-alcohol, III, 630.
- Klumb, H., use of bimetallic strips in radiation measurement and photometry, I, 40.
- See also Erb, T.
- Klumpar, J. See Brdička, R.
- Klusakova, M., effect of temperature on sensitivity of tissues to α -rays, III, 606.
- Kluyver, A. J., and Boezaardt, A. G. J., biochemical preparation of inosose, III, 75.
- Hof, T., and Boezaardt, A. G. J., pigment of *Pseudomonas beijerinckii*, Hof, III, 353.
- Knaggs, I. E., Lonsdale, K., Müller, Alex., and Ubbelohde, A. R., anomalous X-ray reflexions on Laue photographs, I, 348.
- See also Lonsdale, K.
- Knapp, A. A., vitamin-D complex in progressive myopia, III, 489.
- Knappsberg, L. See Kauko, Y.
- Knauer, H. See Simon, A.
- Knauss, H. P., and Murray, A. E., excitation of active nitrogen, I, 176.
- Kneeland, Y., jun., and Mulliken, B., antibody formation in cases of lobar pneumonia treated with sulphapyridine, III, 520. Antibody formation in cases of lobar pneumonia treated with sulphathiazole, III, 920.
- Kneser, H. O., probability of electron spin reversal by collision in nitric oxide gas, I, 99.
- Kniazuk, M. See Flexner, J.
- Knies, P. T., animal tissue reaction to particulate copper stearate, III, 605.
- Knight, C. A., Dutcher, R. A., Guerrant, N. B., and Bechdel, S. I., destruction of ascorbic acid in rumen of dairy cow, III, 751.
- See also Frederick, C. A.
- Knighton, W. S., development of eye, III, 637.
- Knipp, J. K. See Present, R. D.
- Knjasheva, G. V. See Rjabtschikov, D. I.
- Knock, G. G. See Baumgartner, J. G.
- Knoefel, A. F. See Topping, M. C.
- Knöll, H., determination of maximum pore size of filters, I, 273. Rhythmic swarming of *Bacterium vulgare* (*proteus*), III, 265.
- Knol, K. S. See Strutt, M. J. O.
- Knoll, I. See Litchfield, H. R.
- Knoll, W., and Schmidt, G., Pelger's cells in mammalian blood, III, 7.
- Knott, F. A., and Koerner, E. H., storage of transfusion plasma, III, 94.

- Knott, G., molecular structure factors and their application to solution of structures of complex organic crystals, I, 246.
- Knott, J., making microfilial surveys on day blood, III, 451.
- Knott, J. E., effect of sodium nitrate on response of spinach to length of day, III, 940.
- Knout, E. G. See Moody, E. E.
- Knowles, F. G. W., response of isolated white chromatophores of crustacea to change of illumination, III, 852.
- Knowlton, G. C., and Hines, H. M., effects of growth and atrophy on strength of skeletal muscle, III, 568.
- Hines, H. M., and Brinkhous, K. M., effect of wheat-germ oil on vitamin-E-deficient muscular dystrophy, III, 54.
- Cure and prevention of vitamin-E-deficient muscular dystrophy with synthetic α -tocopherol acetate, III, 431.
- See also Hines, H. M.
- Knowlton, J. W. See Rossini, F. D.
- Knowlton, K. See Kenyon, A. T.
- Knox, J. A. C. See Bell, G. H.
- Knox, L. H. See Bartlett, P. D.
- Knox, R., desiccation of filterable tumours and other biological materials, III, 46.
- See also Dmochowski, L.
- Knudsen, V. O., and Fricke, E., absorption of sound in carbon dioxide and in carbon disulphide, I, 388.
- Knudson, H. W., Jnday, C., and Meloche, V. W., silicomolybdate method for silica, I, 371.
- Knutti, R. E. See Yuile, C. L.
- Ko, B. See To, S.
- Ko, K., blood serum sedimentation test for carcinoma, III, 855.
- Kobayashi, Masahisa. See Tsuchida, R.
- Kobayashi, Minoru, and Utiyama, R., creation of meson pairs by γ -rays and the "bremsstrahlung" of mesons in the nuclear field, I, 341.
- Kobayashi, R., comparison of concentration of the virus of Japanese encephalitis in the blood, cerebrospinal fluid, and brain tissues of encephalitis patients, and monkeys and mice infected with the virus, III, 543.
- Kobayashi, S. See Sakaguchi, K., and Tadakoro, T.
- Kobayashi, Tadashi, biochemistry of carbohydrates. LV. Urine-mucoid, III, 754.
- Kobayashi, Teinosuke, and Iwasaki, T., condensation of methylzingerone, II, 222.
- Kobayashi, Y., pharmacology of "senso." V. Cinobufagin, cinobufotalin, and cinobufotalidin, III, 250.
- Kobayasi. See under Kobayashi.
- Kobe, K. A., and Leipper, A., system trisodium phosphate-sodium carbonate-water, I, 164.
- and Stong, J. P. jun., ternary systems ethylene glycol-potassium carbonate-water and dioxan-potassium carbonate-water, I, 322.
- and Vittone, A., liquid-phase hydrogenation of *p*-cymene, II, 270.
- See also Doumani, T. F.
- Kobeko, P. See Kuvshinski, E.
- Kobelev, V. A. See Voroshcov, N. N., jun.
- Kober, S., pregnancy diagnosis in mares by colorimetric estimation of oestrogens, III, 662.
- Kobrak, H. G., Lindsay, J. R., and Perlman, H. B., next step in auditory research, III, 492.
- Kobro, M. See Salvesen, H. A.
- Kobryner, A., and Glajchewicht, Z. U., experiments on red cell sedimentation rate in man, III, 379.
- and Rozenkranc, D., pseudo-leucocytosis of oedematous conditions, III, 183.
- Koch, A., and Heymann, H., ability for work during increasing oxygen deficiency, III, 340.
- Koch, Anton, growth-promoting substances in yeast, III, 511.
- Koch, F. C. See Blauch, M. B., Coffman, J. R., Evans, J. S., Holtorf, A. F., and Kenyon, A. T.
- Koch, F. E. See Madaus, G.
- Koch, H. See Boell, E. J.
- Koch, J. See Boström, K. J.
- Koch, R. See Mamoli, L.
- Kochakian, C. D., tolerance of male and female mice to oestrogens and androgens, III, 654.
- See also Murlin, J. R., and Spurr, C. L.
- Kocher, V. See Schopfer, W. H.
- Kochhar, B. D. See Bakhsh, I.
- Koczy, F. See Schulz, Helga.
- Kodama, S. See Matsumura, S.
- Kodama, T. See Sato, S.
- Kodani, M. See Calvin, M.
- Kodicek, E., determination of nicotinic acid in animal tissues, blood, and foodstuffs. I. Method. II. Application, III, 619.
- Köbcke, H., action of muscle-adenylic acid in spastic diseases of peripheral vessels, III, 193.
- Köddermann, O. See Lemmerz, A. H.
- Koefoed, H. G., Postmus, S., and Veen, A. G. van, presentation of data on diet research. II. Nutrition standards, III, 229.
- Koegel, R. See Norton, A. R.
- Kögl, F., and Erxleben, H., chemistry of tumours. III. Stereochemistry of proteins of myomata and other tumours, III, 317.
- Erxleben, H., and Akkerman, A. M., chemistry of tumours. II. Isolation of glutamic acid from tumour proteins, III, 317.
- and Havinga, E., preparative studies with unimolecular films. I. Continuous preparation of unimolecular layers, I, 253.
- Koehler, J. S., and Dennison, D. M., hindered rotation in methyl alcohol, I, 311.
- Koehn, C. J., and Sherman, W. C., determination of vitamin-A and carotene with the photo-electric colorimeter, III, 321.
- Köhne, G., relationship between diabetes mellitus and pituitary and subthalamic region, III, 642.
- Köllensperger, F. K., effect of cardiazol on reflexes in frogs, III, 681.
- and Scheminzy, F., galvanic contraction during ascending galvanisation in frogs, III, 482.
- Production of substances which increase excitability of spinal cord of frogs during passage of electric currents, III, 482.
- Koelsch, C. F., and Byers, D. J., synthesis of substituted 1:4-naphthaquinones, II, 181.
- Koelsch, K. See Kalk, H.
- Koenemann, R. H., modification of the Miller-Muntz method for colorimetric determination of lactic acid, II, 319.
- See also Fenn, W. O.
- König, E., and Schoen, H., extensive angiomatosis of medulla oblongata and spinal cord with central gliosis, syringomyelia, cystic pancreas, cystic kidneys, and cystic hypernephroid tumours of both kidneys (Lindau's syndrome), III, 890.
- Koenig, E. W., direct determination of alumina in silicates, I, 38.
- Koenig, F. O., quasi-reversible conduction and galvanic cells with liquid-liquid junctions, I, 165.
- and Grinnell, S. W., theory of galvanic cells subject to fields of force. I. Gravitational field, I, 258.
- König, H. (Eidgen), precision photometry of heterogeneous light, I, 133.
- Koenig, H. (Zurich). See Karrer, P.
- Koenig, H. P., solid angle subtended by the main and shadow cones of cosmic radiation, I, 427.
- Koenig, V. L., and Gustavson, R. G., biological assay of stilboestrol, III, 903.
- Koenigsberger, J. G., alteration of ilmenite, I, 181.
- Königstein, (Miss) M. See Britton, H. T. S.
- Könneker, A., and Biltz, W., heats of formation of green manganese sulphide and anhydrous manganese chloride, I, 27.
- Koepcke, G. M., hearing loss due to endocrine disturbance, III, 845.
- Koepfi, J. B. See Bonner, J., and Haagen-Smit, A. J.
- Köppen, R., interfacial phenomena in silica gels; sorption, catalysis, and dyeing, I, 113.
- Koerber, W. See Berl, E.
- Koern, V., binary alloy system silver-tellurium, I, 355.
- Koerner, E. H. See Knott, F. A.
- Körner, F., "myon," an elementary muscle unit, III, 1.
- Köster, W., system iron-cobalt-beryllium, I, 156.
- and Mulfinger, W., systems copper-nickel-sulphur and copper-nickel-arsenic, I, 323.
- Kogan, I. M., and Sosnovski, T. A., transformations of *Bz*-hydroxyquinoline derivatives. II, II, 54.
- Kogut, B. See Jacobi, M., and Zucker-man, I. C.
- Kohl, H., insulin inactivation in diabetic blood, III, 562.
- Rössel, W., and Schipper, F., insulin inactivation in blood in various diseases, III, 644.
- Kohl, M. F. F., and Flynn, L. M., deacylation of N^4 -*n*-acylsulphanilamides and N^4 -*n*-acylsulphanilylhydroxamides *in vitro*, III, 918.
- Köhler, A. See Bender, M.
- Köhler, D. See Troisier, J.
- Köhler, E. P., Jacobs, T. L., and Sonnichen, H. M., hexahydroacetomesitylene, II, 222.
- and Whitcer, W. J., optically active α -carbomethoxy- α -diphenyl- γ -naphthylallene, II, 307.
- Köhler, M., influence of temperature on X-ray interference in monatomic hexagonal crystals, I, 100.
- See also Justi, E.
- Kohlhaas, R., structure of crystalline aliphatic compounds; X-ray study of diethyl ether, I, 404.
- and Stüber, C., transformations of organic compounds in the solid state (compounds with long chains). II. *n*-Tricosanoic acid, II, 64.
- Kohlrausch, K. W. F., Raman effect and problems of constitution. XIV. Methyl vinyl ketone, I, 146.
- What does the Raman effect contribute to determination of constitution? I, 146.

- Kohlrausch, K. W. F., and Seka, R., Raman effect and problems of constitution. XVI. 1- and 2-Methylated benzotriazole and indazole, I, 346.
- and Wagner, J., Raman effect. CVIII. Spectral transformations $XY_4 \rightarrow XZ_4$: correction, I, 243.
- See also Kahovec, L.
- Kohlstadt, K. G., and Page, I. H., production of renin by constricting renal artery of an isolated kidney perfused with blood, III, 475. Liberation of renin by perfusion of kidneys following reduction of pulse pressure, III, 886.
- Page, I. H., and Helmer, O. M., activation of renin by blood, III, 842.
- See also Page, I. H.
- Kohman, E. F., oxalic acid in foods: behaviour and fate in diet, III, 319.
- Kohn, H. I., and Klein, J. R., synthesis of factor V (puridine nucleotides) from nicotinic acid *in vitro* by human erythrocytes, III, 878.
- See also Harris, J. S.
- Kohn, J. L., Rubin, H. J., and Hobart, H. M., treatment of pneumonia during pertussis with sulphapyridine, III, 919.
- Koiwa, M., effect of hypnotics, naphthylamine, and picrotoxin on glomerular filtration and tubular reabsorption, III, 502. Effect of gum acacia infusion and blood transfusion on glomerular filtration and tubular resorption in normal and in cantharidin-poisoned rabbits, III, 502.
- Koizumi, H., origin and clinical significance of impure first heart sound, III, 841.
- Koizumi, M., exchange reaction of nuclear hydrogen atoms of phenol. II. Exchange reaction in acid solution, I, 30. Exchange of hydrogen atoms between pyrrole, indole, and its methyl derivatives and water. VI. Exchange between 2- and 3-methylindole and 2:3-dimethylindole and water. VII. Exchange between indole and indene and water in alkaline solution, I, 122. Exchange reaction of nuclear hydrogen of aniline hydrochloride in aqueous solution. I.—III., I, 166, 222, 260.
- Kojima, S. See Sagane, R.
- Kok, D. J., and De Jongh, S. E., action of "opecta" on clotting time of blood, III, 378.
- See also Oestreicher, F.
- Kokeguti, K., triboluminescence of substituted pyridines, II, 105.
- Kolarov, N., volatility of small particles of salt crystals with and without polymorphic change, I, 248. Gel water in pure salt crystal systems and their hydrolytic decomposition on heating, I, 354.
- See also Balarev, D.
- Kolb, H. See Seiferth, L. B.
- Kolb, J. J., and Toennies, G., methionine. IV. Colour reaction of methionine, II, 38.
- Kolb, L. C., effect on micturition of removal of vesical trigone, III, 418.
- Kolb, W. See Fehér, F.
- Kolesnikov, D. G., and Schvartzman, A. G., alkaloids of *Setum acre*, L., II, 197.
- Kolesnikova, N. A., growth and transformation of follicular and tegumental cells of the ovary outside the organism, III, 126.
- Koletzky, S., and King, B. G., fatal renal insufficiency following administration of sulphapyridine, III, 921.
- See also Freeman, H. E., and Zamecnik, P. C.
- Kolff, W. J., determination of venous pressure, III, 294.
- Kolhörster, W., and Matthes, I., atmospheric cosmic-ray absorption and mesons, I, 91.
- Kolin, A., plethysmometry, III, 100.
- Koll, W., and Külz, F., follicular hormone in progynon dragees, III, 652.
- Koller, F., clinical action of naphthoquinone derivatives (vitamin-K action), III, 185. Haemolysis in pernicious anemia and spruce, III, 557.
- and Fiechter, N., vitamin-K and haemorrhagic diatheses of newborns, III, 559.
- and Wuhrmann, F., action of vitamin-K on coagulation time in cases of obstructive jaundice, III, 92.
- See also Löffler, W.
- Koller, P. C., new race of *Drosophila miranda*, III, 3.
- Kolloff, H. G., and Hunter, J. H., sulph-anilamide derivatives. II. Arylidene derivatives of N¹-substituted sulphanilamides. III. N⁴-Heteroacyl derivatives of N¹-substituted sulphanilamides. IV. N⁴-Aryl- and N⁴-arylidene-N¹-substituted sulphanilamides, II, 76, 327, 330.
- Kolmer, J. A., therapeutic activity of sulphanilamide and allied compounds in experimental brucellosis in mice, III, 521. Chemotherapy of bacterial diseases, III, 677.
- and Rule, A. M., sulphanilamide and sulphapyridine in treatment of experimental *B. friedländer* and *B. coli* infections of mice, III, 245.
- Kolotova, L. A. See Bobrov, P. A.
- Kolough, F., lymphocyte in acute inflammation, III, 91.
- Kolthoff, I. M., amperometric titrations, I, 446.
- and Amdur, E., cerimetric determination of small amounts of arsenic after reduction with hypophosphite reagent, I, 268.
- and Eggertsen, F. T., ageing and coprecipitation. XXXII. Adsorptive properties and the determination of the specific surface of lead chromate, I, 409.
- and Laitinen, H. A., voltammetric determination of oxygen, I, 419.
- and Langer, A., amperometric titrations. II. Titration of nickel with dimethylglyoxime using the dropping mercury electrode as indicator electrode, I, 131.
- and Miller, C. S., mixed potentials at the dropping mercury electrode, I, 414.
- and O'Brien, A. S., ageing and formation of precipitates. XXX. Determination of specific surface of silver bromide by radioactive and dye methods. XXXI. Ageing of silver bromide, I, 108.
- and Pan, Y. D., amperometric titrations. I. Amperometric titration of lead with dichromate or chromate, I, 131.
- See also Guss, L. S., Laitinen, H. A., and Lingane, J. J.
- Kolumban, A. D., and Essex, H., effect of electric fields on decomposition of nitrous oxide by α -rays, I, 368.
- Komar, A. See Bujnov, M.
- Komarov, O., and Komarov, S. A., effect of olive oil and cod-liver oil on gastric secretion in dog, III, 811.
- See also Babkin, B. P., and Komarov, S. A.
- Komarov, S. A., and Komarov, O., precipitability of pepsin by colloidal aluminium hydroxide, III, 663.
- and Krueger, L., effect of aluminium hydroxide gel on gastric secretion in dog, III, 663.
- Langstroth, G. O., and McRae, D. R., secretion of crystalloids and protein material by the pancreas in response to secretin administration, III, 43.
- and Stavratsky, G. W., nitrogenous constituents of cat's submaxillary saliva evoked by parasympathetic and sympathetic stimulation, III, 852.
- See also Babkin, B. P., Day, J. J., Komarov, O., and Langstroth, G. O.
- Komissarenko, V. P., pathogenesis of insulin convulsions, III, 898.
- Komlev, S. M. See Petrov, A. D.
- Komm, E., and Pinder, H., determination of creatinine with *m*-dinitrobenzoic acid, III, 619.
- Komori, S., preparation of higher unsaturated alcohols. IV. and V. Hydrogenation of methyl erucate, II, 202, 335.
- Komppa, G., and Nyman, G. A., fenchene series. X. Isomerisation of α -fenchene, II, 228.
- Komschilov, N. F., additivity of molecular volumes, I, 17. Determination of the parachors of liquids and solids in solution, I, 61.
- See also Krestinski, V. N.
- Kon, G. A. R., and Soper, H. R., saponin. VIII. The saponin of fuller's herb, II, 257. Conversion of quillaic acid into a hydrocarbon, II, 370.
- See also Elliott, D. F., and Heywood, B. J.
- Kon, S. K., nutritive value of egg, III, 591.
- See also Henry, K. M.
- Kondo, H., and Katsura, H., *Lycoris* alkaloids. XIV. Constitution of lycorine. VI. XV. Constitution of lycorine. VII., II, 144, 316.
- and Ono, Setuo, constituents of "senso." X. Isomeric anhydrogamabufotalins, II, 228.
- Suzuki, Kohei, and Satomi, M., alkaloids of *Stemona tuberosa*, Loureiro. II. Tuberosemonine, II, 237.
- and Takeda, Keniti, constituents of *Lindera strychnifolia*, Vill., root. III., II, 99.
- and Watanabe, Toshio, *Sinomenium* and *Cocculus* alkaloids. XLVII. Alkaloids of *Stephania japonica*, Miers. VI. Protostephanine. II., II, 334.
- Kondo, K., effect of oxidation on toxicity of arspenamine preparations. II. Physico-chemical properties of the oxidation products and their toxicity for mice, III, 253. Change of toxicity of two derivatives of arsenobenzene and phenylarsenoxide, III, 681. Change of toxicity of different arsenobenzene preparations by oxidation; action on arterial and venous blood pressure of rabbits and on isolated frog's heart, III, 864.
- and Kim, S., influence of arsenobenzene and its derivatives on respiration and circulation, III, 681.
- Kondo, Y. See Masamune, H.
- Kondo, Yukio, and Toyama, O., high-temperature oxidation of carbon monoxide catalysed by quartz surface, I, 168.
- Kondorski, E., hysteresis in ferromagnetics, I, 200.

- Kondritzer, A. A., precipitation pattern of serum-proteins in phenylpyruvic oligophrenia, III, 839.
- Koneff, A. A., pituitary changes in male rats reared and maintained on "pure" dietaries with and without vitamin-E, III, 494.
See also Reese, J. D.
- Konenko-Gratschova, I. I. See Kornilov, I. I.
- Konheim, B. G., functional significance of cerebellar and decussating medullary pathways of frog, III, 199.
- Konigsberg, M. See Wolfrom, M. L.
- Konikov, A. P., influence of neutral salts on dissociation coefficients of ampholytes. I and II, 1, 73.
and Lerman, C. N., alkaline hydrolysis of acetylated dipeptides, I, 223.
- Konikova, A., glutamic acid of proteins [relation to malignancy], III, 507.
- Koniuszy, F. See Folkers, K.
- Konopinski, E. J., and Bethe, H. A., mean life of ^{87}Rb , I, 337.
See also Bethe, H. A.
- Konorski, J. See Lubinska, L.
- Kononov, I. N., and Frolova, V. N., influence of vernalisation on tillering of plants, and heading of plants and number of spikelets in a spike, III, 364.
- Konovalova, R. A., Junusov, S., and Orékhov, A. P., alkaloids of Papaveraceae family. IV. Alkaloids of *Roemeria refracta*, D.C.; structure of roemerine and synthesis of 2:3-methylenedioxyphenanthrene. VI. Alkaloids of *Glaucium fimbriigerum*, II, 13, 111; III, 550.
and Orékhov, A. P. [with Filina, A.], *Aconitum* alkaloids. I. Alkaloids of *Aconitum talasicum*, II, 197.
See also Junusov, S.
- Koolhaas, (Miss) J. See De Haas, W. J.
- Koonen, H. F. See Scudi, J. V.
- Koopman, L. J. See Cate, J. ten.
- Koopmans, S., action of various substances on cerebral blood vessels, III, 384.
- Kopp, I., effect of fever on postural changes in blood pressure and pulse rate, III, 101. Chronic leucopenia with fatal termination due to agranulocytic angina, III, 704.
- Kopp, J. See Reitz, O.
- Koppányi, T., Herwick, R. P., Linegar, C. R., and Foster, R. H. K., pharmacology of 2:4-diketo-3:3-diethyltetrahydropyridine and 2:4-diketo-3:3-diethylpiperidine, III, 524.
and Linegar, C. R., existence of respiratory neurohormone [action of acetylcholine on breathing], III, 17. Existence of respiratory neurohormone, III, 634.
See also Coffey, R. J., and Hazleton, L. W.
- Kopstein, G. See Fantus, B.
- Kopstein, G. G., intestinal motility [in man], III, 908.
- Korb, H., increased effect of X-rays in connexion with local short-wave therapy ($\lambda=1\text{ m.}$), III, 258.
- Kordes, E., atomic distances from optical refraction data. I and II, I, 16, 99.
- Kore, S. See Briusova, L. J.
- Korelov, M. N. See Kraft, J. A.
- Korenchevsky, V., and Hall, K., metaplasia and adenoma-like changes in uterus of rats injected with sex hormones, III, 659.
- Korenchevsky, V., and Ross, M. A., kidneys and sex hormones, III, 744.
See also Hume, E. M.
- Korenman, I. M., flotation reaction for aluminium, I, 329.
and Dudnik, V. V., detection of nickel by a flotation reaction, I, 270.
and Sorokina, N. T., detection of bismuth by a flotation reaction, I, 271.
- Korényi, A., histology of transplanted breast cancer of mice, III, 46. Transplantation of Ehrlich's cancer in young and old mice, III, 46.
- Korff, J. See Eilers, H.
- Korff, S. A., fast neutron measurements with recoil counters, I, 90. Solar influences on cosmic-ray intensity at high elevations, I, 91. Bursts in cosmic-ray ionisation in the equatorial zone, I, 341.
and Ramsey, W. E., grid to reduce operating voltage in Geiger-Mueller counters, I, 420.
See also Bethe, H. A., Clarke, E. T., and Murphy, E. J.
- Korfmacher, K., solubility in water and adsorption of genins and glucosides of the digitoxin and *k*-strophanthin groups, III, 523.
See also Haarmann, W.
- Kofinek, J., and Babička, J., selectivity of *Mycobacteria* for heavy metals, III, 264.
- Kornberg, H. A. See Hazlet, S. E., and Snyder, H. R.
- Kornblith, B. A., lymphogranuloma venereum: treatment of 300 cases, III, 247.
- Kornblum, K. See Moon, V. H.
- Korndorf, V. A. See Ellovitch, S. J.
- Korneieva, A. V., and Poljakov, M. V., kinetics of slow oxidation of carbon monoxide, I, 76.
- Kornilov, I. I., Mischev, V. S., and Konenko-Gratschova, O. K., equilibrium diagram of the ternary system iron-chromium-aluminium. II, I, 156.
- Kornmüller, A. E., electro-encephalography in man, III, 200.
- Korolev, A. J., and Vilenski, V. A., interaction of casein with aqueous solutions of aniline and pyridine, II, 30.
See also Vilenski, V. A.
- Koroleva, V. I., reaction of tetrahydroquinoline with α -oxides, II, 189.
- Korschak, V. V., preparation of higher tertiary alcohols, II, 3.
- Korsching, H., and Wirtz, K., separation of liquid mixtures by the Clusius separation tube method, I, 35. Separation of liquid mixtures by thermo-diffusion, I, 421.
- Korschunov, A. V. See Grose, E. F.
- Korschunov, I. A., heat of formation of aluminium sulphide, I, 217.
- Korshunova, A. See Chlebnikov, N.
- Korsunski, M. I., Lange, F. F., and Sepinel, V. S., threshold value for nuclear excitation of ^{113}In by X-rays, I, 278.
- Korteweg, R. See Van Gulik, P. J.
- Korth, J. See Derra, E.
- Korth, W., bactericidal power of blood after administration of sulphapyridine, III, 436.
- Kortüm, G., and Seiler, M., critical selection of colorimetric, spectrophotometric, and spectrographic methods for absorption measurements, I, 175.
- Kosaka, H. See Miyazima, T.
- Koschara, W. See Wieland, H.
- Koschelev, A. F. See Turova-Pollak, M. B.
- Koscheleva, N. F. See Madaeva, O. S.
- Koschekov, A. A., X-ray study of the primary oxide film on iron, I, 286.
- Koschtojan, C. S., analysis of symptoms of polyneuritis in vitamin-B₁ deficiency in the light of chemical theory of nervous processes, III, 50.
and Mitropolitskaja, R. L., mechanism of formation and destruction of peripheral chemical transmitters, III, 24.
- Koser, S. A., Dorfman, A., and Saunders, F., pyridine derivatives and other compounds as growth-promoting substances for dysentery bacilli, III, 612.
See also Dorfman, A.
- Koshantschikov, I., value of carbohydrates in nutrition of the imaginal stage of *Holometabola*, III, 426.
- Koshuchar, E. M., metabolism of ducks' eggs during embryonic development. III. Calcium and magnesium metabolism, III, 217. Metabolism of eggs of domestic birds during embryonic development. I. Water metabolism of duck's egg, III, 783.
- Koshuchovskii, A. A. See Kuznetsov, D. I.
- Kosin, I. L., body size as [sex] factor in interpreting effect of hormone injections in baby chicks, III, 808.
See also Munro, S. S.
- Kosolapov, B. M., biuret reaction, II, 264.
- Kosse, J. See Necheles, H.
- Kossel, A. J. See Lohmann, K.
- Kossel, W., space lattice interference and resonance processes, I, 100.
and Möllenstedt, G., electron interference in convergent bundles, I, 101.
- Kostenko, A. See Jaroslav, S.
- Koster, H., Shapiro, A., and Warshaw, R., concentration of procaine in cerebrospinal fluid of man after subarachnoid injection, III, 680.
- Shapiro, A., Warshaw, R., and Margolick, M., removal of procaine from cerebrospinal fluid during anaesthesia, III, 681.
See also Goldfarb, W.
- Kosterhon, K. See Hüttig, G. F.
- Kosterlitz, H. W., galactose-1-phosphoric acid in galactose metabolism, III, 150.
- Kostov, D., chromosome structure and behaviour, III, 374.
See also Schmutz, A.
- Kozsler, V., congenital malformations of intestinal tract, III, 907.
- Kot, A. A., adsorption of hydrochloric and sulphuric acids by commercial active charcoals, I, 252.
- Kotelkov, N. Z., and Kotelkova, K. P., determination of low concentrations of chloride ion, I, 37.
- Kotelkova, K. P. See Kotelkov, N. Z.
- Kothari, D. S. See Gogate, D. V.
- Kothe, H., status thyreo-suprarenalis (M. B. Schmidt), III, 643.
- Koton, M. M., equilibria in the systems $\text{CH}_3\text{R}\cdot\text{OH}\cdot\text{R}\cdot\text{CHO}\cdot\text{R}\cdot\text{CO}_2\text{H}\cdot\text{R}\cdot\text{CO}_2\text{CH}_2\text{R}$. I. Influence of the nature of the radical R, I, 217. Dissociation in alcohols of compounds of the type $\text{R}\cdot\text{HgPh}$, where R is an acid residue, II, 59. Reaction of lead tetraphenyl and bismuth triphenyl with monocarboxylic acids. I. Action of formic and acetic acid on PbPh_4 and BiPh_3 , II, 199.
and Florinski, F. S., decomposition of organic mercury compounds HgRBr in alcohols, II, 158.

- Kotov, B. P., crystal structure of sodium peroxide octahydrate. I. Determination of density, unit cell, and possible space-groups, I, 246.
- Kotscherigin, G. See Antonov-Romanovski, V.
- Kotscheschkov, K. A., Nesmejanov, A. N., Nadj, M. M., Rossinskaja, I. M., and Borisova, L. M., carbonyls of group VI metals. I., I, 298.
- Kotschetkov, N. K. See Lurie, S. I.
- Kott, A. E. See Smith, G. Frederick.
- Kotte, J. H., and Vonderake, A. R., Houssay phenomenon in man, III, 577.
- Kottgen, H. U., and Tiling, W., chronaxial investigations in infants, III, 889.
- Kottmann, U., permeability of blood-brain barrier, III, 890.
- Kotz, J., and Kaufman, M. S., obstetric analgesia, III, 252.
- and Parker, B., endometrial patterns in dysmenorrhoea, III, 127.
- Kotzovsky, L. See Zernoff, V.
- Kounine, B. See Fitzgerald, G. M.
- Kountz, W. B. See Smith, J. R.
- Kovacs, J. See Ecker, E. E.
- Kovalenko, J. I. See Borziak, P. G.
- Kovarik, A. F. See Curtiss, L. F.
- Koven, A. L., and Beard, H. H., effect of parenteral injection of methylated purines on creatine-creatinine metabolism, III, 333.
- Pizzolato, P., and Beard, H. H., effect of injection of adrenaline, eschatin, per-corten, and saline into normal and adrenalectomised rats on muscle-creatinine and creatine-creatinine excretion, III, 728.
- Kowalzig, G. See Meister, W.
- Kowarski, L. See Halban, H., jun.
- Koyama, C. See Hirano, N.
- Koyanagi, H. See Tsujimoto, Misumaru.
- Kozlik, F., comparative anatomy of ducts of kidney, III, 85.
- Kozlov, V. P., and Talibov, D. G., naphthalene derivatives. I. Action of chlorates on naphthalenemonosulphonic acids, II, 161.
- Kozodaev, M. S. See Alihanov, A. I.
- Kraemer, M., use of hydrated magnesium trisilicate in peptic ulcer, III, 36.
- and Aaron, B., use of hydrated magnesium trisilicate for peptic ulcer, III, 500.
- Kraetsch, H. J., endocrine therapy of cryptorchidism, III, 648.
- Kraetzer, A. F. See St. George, A. V.
- Krafka, J., parthenogenic cleavage in human ovary, III, 277.
- Krafka, J., jun., changes in elasticity of aorta with age, III, 475.
- Kraft, H. See Anschütz, L.
- Kraft, J. A., and Korelov, M. N., prevention of infestation of Uzbekistan apiaries with *Merops apiaster*, L. [by sodium cyanide], III, 340.
- Krahl, M. E., effect of variation in ionic strength and temperature on apparent dissociation constants of thirty substituted barbituric acids, I, 256.
- Kelch, A. K., and Clowes, G. H. A., rôle of changes in extracellular and intracellular p_H in action of local anaesthetic bases, III, 525.
- See also Clowes, G. H. A., and Hutchens, J. O.
- Kraines, R. See Brown, A. W.
- Kraines, S. H., and Gellhorn, E., effects of insulin hypoglycaemia on blood-pressure response to oxygen deficiency in man, III, 18.
- Kraines, S. H., and Sherman, I. C., adrenergic and neurotic symptoms, III, 579.
- Kraiuchin, B., and Schtscherbakov, N. M., neuro-muscular chronaxie in Abchasians of extreme old age, III, 109.
- Krajan, A. A., preparation of permanent frozen sections of loose-texture tissues, III, 374.
- Kramer, B., and Halpert, B., marble bones. I. Clinicopathological observations, III, 2.
- Yuska, H., and Steiner, M. M., marble bones. II. Chemical analysis of bone, III, 2.
- See also Sobel, A. E.
- Kramer, C. G. See Havens, W. P.
- Kramer, D. W., intermittent venous compression in treatment of peripheral vascular disorders, III, 193.
- Kramer, M. L. See Goldbloom, A. A.
- Kramer, M. M., Dickman, R. M., Hildreth, M. D., Kunerth, B. L., and Riddell, W. H., riboflavin value of milk, III, 323.
- Kramer, P. J., forces concerned in intake of water by transpiring plants, III, 457.
- Root resistance as a cause of decreased water absorption by plants at low temperatures, III, 939.
- Kramer, S. P., filterability of bacteria, III, 356.
- Kramers, H. A., theory of ferromagnetism, I, 200.
- Brownian motion in a field of force and diffusion model of chemical reactions, I, 259.
- Krant, H., Lehmann, G., and Bramsel, H., statistics of nutritional requirements of individual trades, III, 318.
- Krantz, J. C., jun., action of drugs on cells, III, 529.
- Carr, C. J., and Forman, S. E., alkyl nitrites. V. Pharmacology of high mol. wt. alkyl nitrites, III, 333.
- Carr, C. J., Forman, S. E., and Ellis, F. W., alkyl nitrites. III. Pharmacologic study of a new series of organic nitrites. IV. Pharmacology of isomannide dinitrate, III, 62.
- Carr, C. J., Forman, S. E., and Evans, W. E., jun., anaesthesia. I. Anaesthetic action of cyclopropyl methyl ether, III, 823.
- See also Beck, F. F., Kunkel, A. M., and Morrison, S.
- Krantz, K., action of arsenicals in lichen ruber planus, III, 526.
- Kranz, H., absorption of sodium salicylate after oral and rectal administration, III, 438.
- Krapivine, A. See Sanfourche, A. A.
- Krappe, J. M., laboratory [heating] torch, I, 373.
- Krasikov, S. E. See Bogdanov, S. G.
- Krasilshchikov, A. I., kinetics of decomposition of carbamide in aqueous solution, I, 260.
- Krasno, L. See Brock, S.
- Krasnov, A. Z., vapour pressure of ammonia over fused zinc chloride ammoniate, I, 257.
- Krasnow, F. See Rosen, I.
- Krasny-Ergen, W., separation of uranium isotopes, I, 298.
- Kratinova, K. R., and Bosis, R. B., tissue-ascorbic and dehydroascorbic acid content of rats and guinea-pigs of different ages, III, 53.
- Kratz, L., glass electrodes, I, 375.
- Construction and potential of glass electrode cells; sign, normalisation, and direct applicability of p_H scales, I, 375.
- Kratzsch, G. See Simon, A.
- Kraul, L., metabolic disturbances and sterility in women, III, 307.
- Kraus, C. A., non-aqueous solutions, I, 66.
- See also Fowler, D. L., and Mead, D. J.
- Kraus, E. H., and Slawson, C. B., variation of hardness in the diamond, I, 179.
- Kraus, E. J., chronic hydrocephalus, pituitary, and adrenals, III, 402.
- Kraus, I., determination of total serum-proteins, serum-albumin, and serum-globulin, III, 882.
- Kraus, O., basicity of heteropoly-acids—a problem in structure, I, 61.
- Krause, M. See Mainzer, F.
- Krauskopf, E. J., Snell, E. E., and McCoy, E., growth factors for bacteria. XI. Pantothenic acid and riboflavin requirements of bacteria, III, 354.
- Krauss, B. H. See Sideris, C. P.
- Krauss, W., and Schuleit, H., catalytic oxidation of ammonia at low pressures on platinum and alloys of platinum with rhodium and ruthenium, I, 169.
- Krauter, S., cold haemagglutination, III, 559.
- Krautz, E., charging and lowering of charge of electron-irradiated luminous substances and semi-conductors, I, 197.
- Kravetz, B. See Jantovski, S.
- Kravkov, S. V., influence of odours on colour vision, III, 399.
- Kravtschenko, V. M., ternary system benzene-toluene-naphthalene, I, 27.
- Kraybill, H. R. See Thornton, M. H.
- Krayenbühl, H., visual field determination and diagnosis of cerebral tumours, III, 200.
- Krebs, A., specific radioactivity of human blood and its significance in radium poisoning, III, 258.
- Krebs, H. A., oxidation of *d*(+)-proline by *d*-amino-acid oxidase, II, 7.
- Citric acid cycle, III, 435.
- Citric acid cycle and Szent-Györgyi cycle in pigeon breast muscle, III, 609.
- and Cohen, P. P., metabolism of α -ketoglutaric acid in animal tissues, III, 58.
- Glutamic acid as hydrogen carrier in animal tissues, III, 148.
- and Eggleston, L. V., bacterial urea production; metabolism of *Corynebacterium ureafaciens*, III, 355.
- Oxidation of pyruvate in pigeon breast muscle, III, 480.
- Eggleston, L. V., Kleinzeller, A., and Smyth, D. H., fate of oxaloacetate in animal tissues, III, 859.
- Smyth, D. H., and Evans, E. A., jun., determination of fumarate and malate in animal tissues, III, 778.
- Krebs, J. See Scheuert, A.
- Krebs, K., value of "amides" in feeding of cattle, III, 142.
- Krebs, K. G., and Franke, H., determination of sulphonamides, III, 860.
- Kreide, U., and Kudicke, H., cell-free transmission of tumours in mammals, III, 423.
- Kreilkamp, B. L., and Boyden, E. A., variability in composition of sphincter of Oddi, III, 781.
- Kreimer, B. See Jaroslav, S.
- Krein, S., Hamblen, F. A., and Porcelli, L., effect of sulphanilamide on cross-matching of blood, III, 559.
- Kreiser, J., transition probabilities in the doubly-excited helium atom, I, 423.
- Krejci, L. E. See Newell, J. M.
- Kreke, C. W. See Cook, E. S.

- Kremen, A. J., Taylor, H. L., and Hall, Harry, skin sensitivity of men to bovine plasma, and its albumin and globulin fractions, III, 705.
See also Wangenstein, O. H.
- Kremer, C. B., and Bendich, A., alkanolamines. IX. Reducing and hydrolysing action of ethanalamines on dichloronitrobenzenes, II, 276.
- Kremer, D. N., Shore, P. D., and Wiesel, B. H., phenolphthalein as test in gastrointestinal disease, III, 218.
- Kremers, E. D. See Borsook, H.
- Kremers, M. Y. See Borsook, H.
- Krestinski, V. N., and Malevskaja, S., products obtained by saturating Δ^2 -carene with hydrogen chloride, II, 17.
- Malevskaja, S., Komschilov, N. F., and Kazeeva, E. V., resin acids. III. Primary resin acids isolated from Russian pine resin, II, 284.
- Novak, A., and Komschilov, N. F., resin acids. II. Structure of abietic acid, II, 256.
- Kretschmar, H. H., valve potentiometer and its application to p_H determination, I, 175. Detection of bovine mastitis [by colour tests], III, 356.
- Kretovitsch, V. L., Sokolova, A. I., and Ushakova, E. N., effect of relative air humidity and anaerobiosis on freshly harvested grain of wheat, III, 691.
- Kretschmer, H. L., and Brown, R. C., alkalis and kidney stones, III, 223.
- Kretschmar, N. R. See Peck, W. S.
- Kreutzer, W. A., host-parasite relationships in pink root of *Allium cepa*, L. I. Pigment of *Phoma terrestris*, III, 367.
- Kreveld, A. van, improved agar bridge for p_H measurements, I, 41.
- Krevelen, D. W. van. See Waterman, H. I.
- Krewson, C. F., and Elvehjem, C. A., licanic acid of oticicia fat: its nutritive value and efficiency, III, 425.
- Schantz, E. J., and Elvehjem, C. A., relation of skim milk feeding to cataract production, III, 398.
See also Schantz, E. J.
- Krichesky, B., influence of thyroidectomy on period of gestation in rabbit, III, 661.
- and Pollock, W., toxicity of extracts of post-partum rabbit uterus, III, 738.
- Krieger, C. H. See Lowe, J. T.
- Krieger, V. I., and Kilvington, T. B., antidiuretic substance in urine in relation to normal and toxæmic pregnancy, III, 901.
- Krige, L. J., bore-hole temperatures in the Transvaal and Orange Free State, I, 178.
- Krilo, T. N., surface oxidation of metals in air, I, 223.
- Krinbill, C. A. See Bent, H. E.
- Kring, J. See Gömöri, P.
- Kringstad, H., and Lund, G., filtrate growth factor B₁₂, III, 323.
See also Lund, G.
- Krishnamurthy, P. V. See Giri, K. V.
- Krishnan, B. G. See Aykroyd, W. R.
- Krishnan, K. S., Landau diamagnetism and the Fermi-Dirac energy distribution of the metallic electrons in graphite, I, 102. Electronic specific heat of graphite, I, 201.
- Chorghade, S. L., and Ananthapadmanabhan, T. S., dimorphism of diphenyloctatetraene crystals, I, 432.
- and Ganguli, N., large anisotropy of the electrical conductivity of graphite, I, 14.
- Krishnan, R. S., scattering of polarised light in colloids, I, 292.
- and Banks, T. E., disintegration produced by deuterons, I, 278. Fission of uranium and thorium under deutron bombardment, I, 340.
- Krishnaswami, K. R. See Jarayaman, N., and Subbaraman, P. R.
- Krishnaswami, R. See David, J. C.
- Kriss, M., and Marcy, L. F., metabolism of tyrosine, aspartic acid, and asparagine with special reference to respiratory exchange and heat production, III, 517. Influence of urea ingestion on nitrogen balance and energy metabolism of rats, III, 517.
- Kristal, J. J., congenital diaphragmatic hernia, III, 782.
- Kristensen, K. P., and Vendel, S. N., vitamin-B complex in eczema, III, 428.
- Kriukov, A. A., cathodic indicator, and its application to electrometry, I, 41.
- Kriukova, T. A., determination of solubility of sparingly soluble salts with the polarograph, I, 220.
- Kriagova, A. I., system $AlCl_3$ -NaCl. I. Density. II. Viscosity. III. Conductivity, I, 213.
- Kröger, C., and Graeser, W., systems alkali oxide-CaO- Al_2O_3 - SiO_2 - CO_2 . IX. Reaction behaviour of the different modifications of silica, I, 118.
- and Illner, K. W., systems alkali oxide-CaO- Al_2O_3 - SiO_2 - CO_2 . X. Equilibria in the quaternary system Na_2O -CaO- SiO_2 - CO_2 , I, 217.
- Kröger, F. A., luminescence and absorption of solid solutions in the ternary system ZnS - CdS - MnS , I, 96. Luminescence and absorption of zinc sulphide, cadmium sulphide, and their solid solutions, I, 96.
See also Gisol, J. H.
- Kroeger, J. W. See Brunson, H. A.
- Kröhnke, F., nitrones. V. Acyldiphenylmethanes and the dyes therefrom, II, 90.
[with Schulze, A.], syntheses of pyridiniummethanols. III. Further observations; physiological action of pyridiniummethanols, II, 104.
- Krönig, W., action of carbon monoxide-hydrogen mixtures on cresol under pressure, II, 41.
- Krogman, W. M., peoples of early Iran and their ethnic affiliations, III, 700.
- Kroll, H., Strauss, S. F., and Necheles, H., concentration and detection of dye in abscesses, III, 563.
- Krollpfeiffer, F., Graulich, W., and Rosenberg, A., triazolium salts. IV. Reduction of benzotriazolium salts, II, 56.
- Kropp, B., content and distribution of minerals in human amnion and chorion at term, III, 875.
- Kross, J., appendical stump, III, 664.
- Krotkov, G., carbohydrate and respiratory metabolism in the isolated starving leaf of wheat, III, 458.
- Kroupa, E. See Bisanz, R.
- Kruber, O., fission of heterocyclic compounds of coal tar, II, 103.
- Krueger, A. P., and Scribner, E. J., inactivation of intracellular phage precursor by iodoacetic acid, III, 613.
- Krüger, D. See Freundlich, H.
- Krueger, J., and Mosettig, E., phenanthrene series. XXV. Dibenzo-[f, h]-quinoline and 7-methoxydibenzo-[f, h]-quinoline, II, 289.
- Krueger, J. See also Marker, R. E.
- Krueger, L. See Komarov, S. A.
- Kruger, P. G., biological effects of nuclear disintegration products on neoplastic tissue, III, 424.
See also Green, G. K.
- Krukovsky, V. N. See Herrington, B. L.
- Krumhaar, E. B., Hodgkin's disease, III, 276.
See also Ehrlich, W. E., and Hwang, J. M. S.
- Krumholz, E. See Krumholz, P.
- Krumholz, P., and Krumholz, E., objective microphotometry; photometric analysis of picrates of organic bases, II, 241.
See also Feigl, F.
- Kruse, H. D., Sydenstricker, V. P., Sebrell, W. H., and Cleckley, H. M., ocular manifestations of ariboflavinosis, III, 322.
See also Sydenstricker, V. P.
- Krusen, F. H., and Bennett, R. L., combined fever and sulphanilamide therapy in subacute bacterial endocarditis, III, 861.
See also Huddleston, O. L.
- Krusius, F. E. See Simola, P. E.
- Kruta, V., and Velický, J., effect of thyroidectomy on [guinea-pig] heart, III, 792.
- Krutschakova, F. A., sodium, potassium, calcium, and magnesium content of two differently functioning muscle tissues, III, 713.
- Kruysse, A. See Zwikker, J. J. L.
- Krutz, H. R., structure of colloidal gels, I, 24.
and Kunst, H., dielectric measurements with colloids, I, 292.
and Overbeek, J. T. G., theoretical treatment of the double layer, I, 110.
- Krutz, W. See Wolvenkamp, H. P.
- Krzmarich, P. W., hemicelluloses from oat hulls. II, III, 831.
- Krzyniński, H., elastic properties of nails, III, 374.
- Krzywanek, W., and Quittek, G., changes in nitrogenous matter and ether extract in rumen during digestion, in relation to formation of fat by rumen flora, III, 309.
- Ksanda, C. J., and Henderson, E. P., identification of diamond in the Canyon Diablo iron, I, 179.
- Ku, H. C. See Cheng, L. T.
- Kuan, C. C. See Chi, Y. F.
- Kubaschewski, O., reduction of Nb_2O_5 to Nb_2O by means of hydrogen, I, 369.
and Walter, A., high-temperature calorimetry of alloys, I, 27.
See also Grube, G.
- Kubasta, F. See Wirth, D.
- Kubie, L. S., experimental induction of neurotic reactions in man, III, 112.
- Kubo, H., haemoprotein from root nodules of Leguminosae, III, 368.
- Kubo, M. See Higasi, K.
- Kubo, T., X-ray photographs of natural cellulose, I, 199.
- Kubo, Taizo, establishment and loss of tolerance of tissue cultures to opium alkaloids, III, 154. Sudden and gradual removal of opium alkaloids from tissue cultures accustomed to them, III, 154.
- Kubota, H., Doppler effect observed in Lo Surdo discharge tube, I, 335.
- Kubota, T., regeneration of blood. III, III, 89.
- Kuck, J. A., and Griffel, M., furnace for micro-Carius determination, I, 233.
and Loewenstein, E., Sartorius-Ramberg micro-balance, I, 376.

- Kuck, J. A. See also Niederl, J. B.
Kudicke, H. See Kreide, U.
Kudicke, R., chemotherapy of leprosy in mice, III, 247.
Kudo, Y. See Fujikawa, F.
Kudrina, K. N. See Petrov, A. D.
Kudrjatzeva, A. I. See Volinski, F. A.
Küchler, L., and Pick, H., quantum yield of hydrolysis of monochloroacetic acid, I, 263.
Kuehlhorn, F., correlation between nutrition and organs of mastication of some *Xenarthra*, III, 463.
Kühn, A., eye-colour mutant of *Ptychopoda seriata* modified by temperature and light, III, 395.
Kuehn, A. O. See Pillemer, L.
Kühn, C., advantageous use of codeine-free analgesics, III, 63.
Kühn, W. See Rühl, A.
Kühnau, W. W., treatment of lupus erythematoses with nicotinamide, III, 233. Effect of nicotinamide on porphyrin metabolism and light reaction, III, 514. Nicotinic acid in body-fluids in pellagra and in health, III, 514.
Külz, F., and Rosenmund, K. W. [with Kayser, E., Schwarzhaupt, O., and Sommer, H.], syntheses of substances with spasmolytic action. II., II, 124. See also Koll, W.
Künkele, F., arsenic poisoning and its chemical detection, III, 526.
Künsztler, M., compensatory action of liver after cholecystectomy, III, 135. Action of octinum on gastric motility, III, 250.
Künzel, O. See Keller, C.
Kuenzel, W. See Painter, J. M.
Küster, E., formation of Liesegang rings as model for rhythmic biological processes, III, 224. Effect of centrifuging on viscosity of living protoplasm, III, 259.
Kuether, C. A., Meyer, C. E., and Smith, A. H., metabolism of free citric acid in rat, III, 754.
Kugelmass, N., vitamin-K in prenatal prevention and post-natal treatment of hæmorrhagic disease of newborn, III, 705.
Kuhlmann, D., Ragan, C., Ferrebee, J. W., Atchley, D. W., and Loeb, R. F., toxic effects of deoxycorticosterone esters in dogs, III, 409.
Kuhlmann, F. See Otto, H.
Kuhn, H. See Jackson, D. A.
Kuhn, R., fertilising and sex-determining substances in plants and animals, III, 808.
Moewus, F., and Wendt, G., sex-determining compounds of a green alga, III, 360.
Stene, J., and Sørensen, N. A., distribution of astaxanthin in the animal and vegetable kingdom, III, 368.
See also György, P., and Hartmann, M.
Kuhn, W., Dührkop, H., and Martin, Hans, anisotropy of light absorption of dissolved molecules in an electrical field, I, 249.
Kuipers, J. W. See Hallett, L. T.
Kuitunen-Ekbaum, E., anthelmintic inactivity of fresh pineapple juice *in vivo*, III, 535.
Kuizenga, M. H., and Cartland, G. F., corticosterone and its esters, III, 897.
Kujumgieff, I., preparation of precipitating anti-anthrax sera from horses, III, 869.
Kuk, S., peptic degradation of caseinogen; structure of peptones produced, III, 686.
Kukai, R. See Kiss, A. von.
Kuki, T., Niwa, S., and Hara, R., existence of carbamate ion in reaction of the ammonia-soda process. I. Sodium carbamate-sodium carbonate equilibrium, I, 322.
Kulberg, L. M., and Gorlinski, A. K., complex cuprothiocyanate, I, 227. and Matenko, E., mixed redox catalysts. I. Mechanism of activation of iron by copper, I, 168.
Kulchar, G. See Tainter, M. L.
Kulcicki, J. See Dedek, J.
Kuleschova, M. G. See Lurie, S. I.
Kulgina, V. N. See Gogorischvili, P. V.
Kullenberg, B. See Pettersson, H.
Kultischev, N. P., new deposits of volkonskoite in Udmurtia, I, 48.
Kuman, S. J. See Humoller, F. L.
Kumar, S., and Nath, V., toxæmias of pregnancy, III, 809.
Kumler, W. D., figures in thin layers of grease and viscous liquids, I, 315. Condensation of sulphanilamide with an enol; N⁴- α -bromotetrorylsulphanilamide, II, 371.
Kump, W. See Perrine, T.
Kun, H. See Steinach, E.
Kuna, M. See Ovakimian, G.
Kundigér, D. See Barnes, H. M.
Kundt, W. See Suhrmann, R.
Kundu, B. C., and Preston, R. D., fine structure of phloem fibres. I. Untreated and swollen hemp, III, 175.
Kundu, N. L. See Ghosh, B. N.
Kunerth, B. L. See Kramer, M. M.
Kunerth, W. See Dinger, J. E.
Kung, L. C., Tsao, C. P., and Wilson, S. D., basal metabolism of Chinese children, III, 431.
Kunitika, S. See Nodzu, R.
Kunitz, M., kinetics of formation of chymotrypsin from crystalline chymotrypsinogen and of trypsin from crystalline trypsinogen, III, 163.
Kunkel, A. M., Carr, C. J., and Krantz, J. C., jun., sugar alcohols. XIX. Relationship between chemical constitution and speed of hæmolysis, III, 283.
Kunkel, P., Stead, E. A., jun., and Weiss, S., effect of paredrinol (α -p-hydroxyphenylethyldimethylamine) on sodium nitrite collapse and on clinical shock, III, 103.
See also Stead, E. A., jun.
Kunkel, P. A. See Dandy, W. E.
Kunst, H. See Kruyt, H. R.
Kunstädter, R. H., treatment of hypogonadism in the male with gonadotropic principle of pregnant mares' serum, III, 214.
Kuntschulia. See Asatiani.
Kuntz, A., structure of inferior mesenteric ganglia, III, 715.
and Haselwood, L. A., cutaneo-visceral vasomotor reflexes in cat, III, 716.
Kunz, H. See Drigalski, W. von.
Kuo, P. T., and Ho, C. H., intramuscular injection of sulphapyridine and treatment of lobar pneumonia, III, 521.
See also Tsao, Y. F.
Kuo, T. L., pneumococcus empyema treated by local irrigation with sulphonamide, III, 60.
Kuo, Z. Y., development of acetylcholine in chick embryo, III, 179.
Kup, J. von, treatment of hæmophilia with hormone of corpus luteum, III, 377. Hæmorrhagic diathesis caused by endocrine abnormalities and treated with hormones, III, 377. Relationship of function of pineal gland to heredity and racial characteristics, III, 496.
and Pazar, D., effect of clotting-promoting hormone on normal persons, III, 378.
and Varvasovszky, J., presence in colutoid of hormone promoting clotting of blood, III, 377.
Kuper, J. B. H., electronic absorption photometer, I, 375.
See also Roberts, R. D.
Kuperman, M. E. See Schemjakin, F. M.
Kupperman, H. S. See Finerty, J. C., and Meyer, R. K.
Kuppusami, A. See Guha, P. C.
Kuprevitsch, V. F., intercellular enzymes of rusts and other parasitic fungi, III, 610.
Kurakin, A. N. See Schilov, E. A.
Kurata, F. See Katz, D. L.
Kurbatov, J. D. See Ipatiev, V. N.
Kuribayashi, S., effect of removal of cerebral hemispheres in rabbits with different hepatic efficiency, III, 889.
Kurie, F. N. D., technique of high-intensity bombardment with fast particles, I, 331. Operating characteristics of a cloud chamber designed for use through a range of pressures, I, 376.
and Kamen, M., disintegration of nitrogen by neutrons; further experiments in a low-pressure cloud chamber, I, 306.
Kurihara, Z., micro-determination of histidine, III, 779.
Kurland, A. A. See Rubinstein, H. S.
Kurland, I. See Beilly, J. S., and Litchfield, H. R.
Kurnakov, N. N., chromium-silicon alloys, I, 291.
and Boki, G. B., crystals of silico-chromium, I, 291.
Kurnakov, N. S., Feigelson, I. B., and Bergman, A. G., physico-chemical analysis and the annual cycles of salt lakes, I, 421.
and Klotshko, M. A., physical-chemical analysis, I, 256.
Kuroda, C., and Oshima, H., pigments from sea-urchins and syntheses of related compounds, II, 351.
Kuroda, K., radium, vanadium, chromium, and molybdenum contents of the hot springs of Yunohanazawa and their seasonal variations, I, 303. Lead content of the hot springs of Japan, I, 378. Zinc content of the hot springs of Japan, I, 378. Effect of rain on the composition of the hot springs of Yunohanazawa, Hakone, I, 378. Occurrence of gallium in hot springs of Japan, I, 396. Occurrence of beryllium in hot springs of Japan, I, 396.
Kuroya, H. See Tsuchida, R.
Kursanov, D. N., and Zelvin, R. R., reaction of aliphatic esters with benzene in presence of aluminium chloride, II, 175.
Kurtschatov, I. See Alchazov, D.
Kurtz, F. E., and Holm, G. E., lipins of milk. II. Fat acids of the sphingomyelin-cerebroside fraction, III, 314.
and Schaffer, P. S., separation of hydroxy- from non-hydroxy-aliphatic acids by means of a dibasic acid anhydride, II, 266.

- Kurtz, M. B., and Hill, E. M., Kahn test. I. Tube for preparation of antigen suspension, III, 542.
- Kurylenko, C., fringes in the neighbourhood of the K discontinuity of X-rays, I, 348.
- Kurzrok, R., Miller, E. G., jun., Gegerson, H., and Gegerson, A., action of "trascetin" on rabbit ovary and uterus, III, 655.
- and Wilson, L., hormonal distribution as controlled by tissue uptake [in breasts and genital tract], III, 849.
- Wilson, L., and Perloff, W. H., action of diethylstilbestrol in gynaecological dysfunctions, III, 656.
- See also Wilson, L.
- Kusch, P., Millman, S., and Rabi, I. I., radiofrequency spectra of atoms; hyperfine structure and Zeeman effect in the ground state of ^6Li , ^7Li , ^{39}K , and ^{41}K , I, 275.
- See also Millman, S.
- Kuschel, H., action of cardiazol and mode of administration, III, 252.
- Kusmina, J. L. See Rubinstein, D. L.
- Kusnetzova, V. See Chlopin, V. G.
- Kussakov, M. See Derjaguin, B.
- Kussmann, A., and Mollwo, L., determining electrical conductivity and its temperature coefficient, I, 133.
- Kuster, E., rhythmic precipitation of pigments in cell membranes, III, 547.
- Kutscher, G. W., jun., use of convalescent mumps serum, III, 522.
- and Blumberg, A., use of pectin-agar mixtures in diarrhoea, III, 311.
- Kutschera-Aichberger, H., diet in infectious diseases, III, 229.
- Kuvshinski, E., and Kobeko, P., amorphous state. XII. Dielectric relaxation in amorphous phenolphthalein, I, 9.
- Kuwada, S., and Sasagawa, Y., syntheses of stilbene derivatives. I. New synthesis of *trans*-4:4'-dihydroxy- $\alpha\beta$ -diethylstilbene, II, 215.
- and Takeda, Keinosuke, saponins. XIV. Oxidation of oleanonic acid with nitric acid. XV. Constitution of nitro-compounds of the oleanolic acid series. I, II, 89, 221.
- and Tutihasi, K., sterols. XVIII. Δ^5 -Androsten-17-ol-7-one, II, 48.
- and Yoshiki, S., sterols. XIX. Sterol from *Coix* seeds. XX. Homogeneity of bessisterol and properties of its double linkings. XXI. Constitution of bessisterol, II, 218.
- Kuzell, W. C., and Cutting, W. C., pituitary mitotic changes after administration of oestrogen and after ovariectomy, III, 401.
- See also Cutting, W. C.
- Kuznetsov, A. M., and Protschuchan, D. P., geochemistry of "vapps," I, 334.
- Kuznetsov, D. I., and Koshuchovski, A. A., analysis of mixtures containing primary potassium and primary ammonium phosphate, I, 130.
- Kuznetsov, V. G., and Makarov, E. S., X-ray study of structure of ternary solid solutions of aluminium with magnesium and silicon and their ageing, I, 251.
- Kuznetsov, V. I., detection and determination of germanium. I. New colour reaction; application of hydrogen selenide to detection of germanium, I, 39. Molecular specific heat of hydrocarbons of different degrees of saturation, I, 201.
- Kuznetsov, V. I., preparation of aliphatic α -ketols from magnesium organic compounds and furfuraldehyde, II, 154.
- See also Tschelinev, V. V.
- Kuznetzova, G. I. See Tschelinev, V. V.
- Kwang, H. L. See Hess, K.
- Kwiatkowski, H. H., action of veritol, III, 822.
- See also Keele, C. A.
- Kwit, N. T. See Gold, H.
- Kyger, E. R., jun., Hashinger, E. H., and Wilhelm, E. W., treatment of peptic ulcer with colloidal aluminium hydroxide, III, 36.
- Kyker, G. C. See Bost, R. W.
- Kylin, E., hypophysis implantation in case of diabetes insipidus, III, 28. Hormonal regulation of hair growth, III, 493.
- Kynch, G. J., Lloyd, E. H., and Penney, W. G., calculations on the energies of hydrocarbons, I, 284.
- Kyo, T. See Amano, S.
- Kyser, F. A., hyperparathyroidism, III, 806.
- L
- Laakso, P. V., difficultly decomposable xanthates, II, 328.
- Laar, E. L. See Bates, R. W.
- Laasonen, L. See Enkvist, T.
- La Barre, J., and Kettenmeyer, G., inhibitory effect of hyperthermia on exocrine function of pancreas, III, 584.
- See also Zunz, E.
- Labate, J. S., superior hypogastric plexus—"pre-sacral nerve," III, 371. Influence of uterine and ovarian nerves on lactation, III, 849.
- Labes, R., effect of dipolar substituents rich or poor in residual valencies on addition reactions of phenol derivatives with pyridine-2- and -3-carboxylic acid, II, 200.
- Labriola, R., Curtius degradation with diphenic acid hydrazides, II, 329. Alkaloids of white quebracho bark, III, 175.
- See also Deulofeu, V.
- Labruto, G., composition of gum of *Brachycthon diversifolium*, III, 461.
- Labuzov, S. M. See Salkind, J. S.
- Laby, T. K., and Hopper, V. D., electronic charge, I, 336.
- Lacassagne, A., relationship of hormones and mammary adenocarcinoma in mouse, III, 227. Preponderant rôle of female in hereditary transmission of mammary carcinoma; oestrone experiments, III, 589.
- and Chamorro, A., effect of hypophysectomy on mice susceptible to mammary carcinoma treated with oestrogen, III, 302.
- and Raynaud, A., preventive effect of testosterone on mammary cancer in the mouse, III, 32.
- See also Wollman, E.
- Lacey, M. S., bacteriosis. XXIV. Bacterium associated with leafy galls, fasciations, and "cauliflower" disease of various plants (iii); further isolations, inoculation and cultural studies, III, 547.
- Lacey, W. N. See Budenholzer, R. A.
- Morris, W. M., Nysewander, C. N., and Sage, B. H.
- Lachenicht, P., determination of ovulation by Samuel's method, III, 649.
- Lachman, G. S. See Wolf, E.
- Lachnit, V. See Fleisshaecker, H.
- Lachno, J. V., effect of ascorbic acid on oxidation processes in the central nervous system. I. Effect of lowering ascorbic acid content of the diet on oxidative processes in guinea-pig's brain, III, 52.
- Lachower, D., movement of potassium in irrigated and fertilised red sandy clay, I, 397.
- Lack, W. J., ebdostyle and thyroid gland of *Ichthyomyzon*, III, 781.
- Lackey, R. W. See Metz, M. H.
- Lackman, D. B. See Sevag, M. G.
- Lackner, J. E., and Tulskey, A. S., effect of human pregnancy serum on mobility of non-pregnant uterus, III, 737.
- Lacoste, A., Aubertin, E., and Castagnou, R., renal elimination of haemoglobin, III, 313. Elimination products of haemoglobin in kidney, III, 313.
- Aubertin, E., and De Lachaud, R., renal athrocytosis of bile pigments following biliary stasis in dog, III, 586.
- See also Aubertin, E.
- Lacroix, A., new type of metamorphic rocks (sakenites) forming part of the crystalline schists of Southern Madagascar, I, 46. Rocks devoid of feldspar in proximity to sakenites (Madagascar): chemical composition of the deposits, I, 180. Secondary mineralogical transformations in the phlogopite deposits of the extreme south of Madagascar, I, 237. Phlogopite deposits in extreme south of Madagascar, I, 237. Secondary mineralogical modifications in the phlogopite deposit at Volonandronga (west of the central massif of Madagascar), I, 303.
- Ladd, L. See Ingram, W. R.
- Ladd, L. D. See Buchanan, A. R.
- Ladell, W. S. S., correlation of physico-chemical properties of serum with its effect on growth of tissues *in vitro*. II. Effect of diluting serum on its buffering power, III, 705.
- Ladenburg, K., Chakravorty, P. N., and Wallis, E. S., molecular rearrangements in sterols. IV. Structure of *i*-cholestanone, II, 94.
- Ladewig, P. See Bueding, E.
- La Floresta, A., pharmacology of Sardinian plants. II. *Ephedra vulgaris*, Rich., and *E. nebrodensis*, Tin., III, 332. Effect of various substances on conjunctival absorption of atropine in the rabbit, III, 600. Active principle from *Ephedra vulgaris*, Rich., and *Ephedra nebrodensis*, Tin., from Sardinia, III, 923. Sardinian variety of *Ephedra vulgaris*, Rich., similar to Chinese *Ephedra*, ma-huang, III, 923.
- LaForge, F. B., and Acree, F., jun., behaviour of substituted allenes towards Meinel's colour test, II, 295.
- See also Acree, F., jun.
- Lagally, P. See Jenckel, E.
- Lagatu, H., and Maume, L., optimum nutritional equilibrium correlated with the exploitation of cultivated plants and expediency of agricultural biochemistry, III, 457.
- Lahey, F. H. See Perkin, H. J.
- Lahey, F. N., and Jones, T. G. II., constitution and synthesis of conglomerone, II, 176.
- Lahiri, D. C., effect of viscosity of serum on rate of adsorption of antibodies, III, 168.

- Lahr, J. H. F., site of action of anti-masculinising effect of oestrone. I. Confirmation of Moore's theory. II. Refutation of criticism. III. Hypophysis or sexual centre, III, 654.
- Laidlaw, A. E., and Kennard, M. A., effects of anaesthesia on the blood supply to hypothalamus, III, 884.
- Laidlaw, R. W. See Casamajor, L.
- Laidler, D. See Taylor, A.
- Laidler, K. J. See Eyring, H.
- Laigret, J., and Durand, R., serological proof of neutralising properties of serum towards the typhus virus, III, 357.
- Laird, S. M., relapse after sulphapyridine for gonorrhoea, III, 861.
- Laitinen, H. A., and Kolthoff, I. M., study of diffusion processes by electrolysis with micro-electrodes, I, 106. Diffusion processes in electrolysis with the dropping mercury electrode and with stationary micro-electrodes, I, 362. See also Kolthoff, I. M., and Nahinsky, P.
- Lake, M., influence of weight of duodenal tube tip on its entrance time, III, 585.
- Lakin, H. W. See Byers, H. G.
- Lai, A. B. See Singh, B. K.
- Lal, J. B., constitution of santalin, II, 356.
- Lai, R. B., Mukherji, S. P., Roy, S. C., and Sankaran, G., epidemiology of epidemic dropsy. VIII. Nature and origin of (? toxic) substances present in supplies of mustard oil associated with outbreaks of epidemic dropsy, III, 103. and Roy, S. C., epidemiology of epidemic dropsy. VII. Field studies and controlled experiments, III, 103.
- Lal, S. See Pasnicha, C. L.
- Lallemand, S. See Ance! P.
- Lam, C. R., intra-abdominal pressure, III, 665. See also McClure, R. D.
- Lamar, E. S. See Stone, A. M.
- Lamar, J. K. See Plagge, J. C.
- Lamb, A. B., and Roper, E. E., vapour pressures of unsaturated hydrocarbons, I, 248. and Stevens, R. G., aquation of carbonatopentamminocobaltic bromide, I, 37.
- Lamb, J., and Roberts, E. A. H., cytochrome oxidase in tea fermentation, III, 161.
- Lamb, J. H., quinine dermatitis from "anacin," III, 66.
- Lamb, W. E., jun., deviation from the Coulomb law for a proton, I, 191. and Serber, R., theory of neutron-deuteron impacts, I, 342. and Siegert, A. J. F., production of pairs by fast electrons, I, 309. See also Critchfield, C. L., and Nord-sieck, A.
- Lambert, A. See Heilbron, I. M.
- Lambert, E. F. See Brooks, C. M.
- Lambert, E. H., and Rosenthal, S. R., liberation of histamine-like substance on stimulation of sympathetic nerves, III, 714.
- Lambert, J. See Moureau, P.
- Lambert, P. P., treatment of Addison's disease by subcutaneous implantation of tablets of deoxycorticosterone acetate, III, 897.
- Lambert, R. See Schube, P. G.
- Lambert, R. H. See Graham, C. L., Sheppard, S. E., and Wortis, J.
- Lambert, V. F. See Jones, F. W.
- Lambertini, G., primitive kidney in human embryo, III, 372.
- Lambie, C. G., juvenile gout in a patient suffering from chronic erythronoclastic anaemia; physical state of uric acid in blood and effects of splenectomy, III, 878. Thyrotropic hormone and its relation to clinical syndromes, III, 900.
- Lambie, D. A., and Schoeller, W. R., separation of molybdenum from tin and sulphur, I, 394.
- Lambley, D. G. See Weddell, G.
- Lambooy, J. P. See Woodruff, E. H.
- Lambrechts, A., and Barac, G., spectrum of bilirubin in alkaline media, III, 137.
- LaMer, V. K., and Brescia, F., electrostatic effects on ionisation constants, I, 218. See also Brescia, F.
- Lami, G., reticulocyte-increasing action of gastric juice after parental administration of liver extracts, III, 627.
- Lamla, E., indirect excitation of X-ray interference, I, 100.
- Lamm, O., and Höberg, H., refractometric measurement of free diffusion of soaps in aqueous solution, I, 290.
- Lammers, D. See Fox, W. H.
- Lamont, A. See Shumacker, H. B.
- Lamont, H. R. L., use of the wave guide for measurement of microwave dielectric constants, I, 375.
- Lamontagne, H. See Waugh, T. R.
- La Motta, E. P. See Steinbocker, O.
- Lamoureux, W. F., and Hutt, F. B., variability of body temperature in the normal chick, III, 42.
- Lampert, H., and Röhliger, H., capillary analysis and physical therapy, III, 274.
- Lampland, C. O. See Adel, A.
- Lampost, H., periodic changes in blood-oestrogen, III, 904.
- Lampton, A. K., and Miller, A. J., influence of temperature on internal secretory activity of transplanted ovaries in female rat, III, 650.
- Lams, H., vascularity of olfactory neuroepithelium in mammals, III, 493.
- Lams, M. H., olfactory neuroepithelium in mammals, III, 805.
- Lamy, M. See Debre, R.
- Lamy, R. See Crew, F. A. E.
- Landari, A., and Luco, J. V., depressant action of strychnine on superior cervical sympathetic ganglion and skeletal muscle, III, 156. and Rosenblueth, A., fifth stage of transmission in autonomic ganglia, III, 393. See also Rosenblueth, A.
- Lancaster, W. B., detecting, measuring, plotting and interpreting ocular deviations, III, 204.
- Lancefield, R. C., significance of M and T antigens in cross reactions between types of group A haemolytic streptococci, III, 771.
- Landahi, H. D., mathematical biophysics of central nervous system, III, 21.
- Landau, C. See Bialaszewicz, K.
- Landau, L., polarisation of electrons by scattering, I, 185.
- Landay, J. See Beutner, R.
- Landé, A., eigenvalue problem of the Dirac electron, I, 342.
- Landee, F. A., relationship between electron-sharing ability of radicals and association of organic compounds, I, 149.
- Landen, E. W., spectral sensitivity of spores and sporidia of *Ustilago zeae* to monochromatic ultra-violet light, III, 258. Quantum yield as function of wave-length for inactivation of urease, III, 931. and Ueber, F. M., ultra-violet absorption spectra of active and inactive yeast, III, 350.
- Lander, J. See Svirbely, W. J.
- Landes, G., mechanical methods of auscultation, III, 17.
- Landes, K. K., minerals of Eight Mile Park, Colorado, I, 240.
- Landgrebe, F. See Hogben, L.
- Landis, Q., polariscopic determination of proteolytic activity, III, 826.
- Landra, G., histology of lips in macaques, III, 466.
- Lands, A. M. See Cutting, R. A.
- Landsberg, G. S., Malischev, V. I., and Soloviev, V. E., combination scattering of solutions in heavy water, I, 146.
- Landsberg, J. W. See Hueper, W. C., and Otto, G. F.
- Landsteiner, K., and Chase, M. W., sensitisation of animals with simple chemical compounds, III, 254. Skin sensitisation by intraperitoneal injections, III, 444. Skin sensitisation to simple compound by injections of conjugates, III, 937. and Harte, R. A., group-specific A substances. IV. Substance from hog stomach, III, 740. and Parker, R. C., serological tests for homologous serum-proteins in tissue cultures maintained on a foreign medium, III, 555. and Scheer, J. van der, serological specificity of peptides. III., III, 269. Cross-reactions of egg-albumina sera, III, 774. and Wiener, A. S., agglutinable factor in human blood recognised by immune sera for *rhesus* blood, III, 470. See also Rothen, A.
- Landverk, O. G., $^1\Sigma \rightarrow ^1\Sigma$ transition of the C_2 molecule, I, 6.
- Landy, M., influence of glutamine on growth of *Streptococcus haemolyticus*, III, 169.
- Lane, C. T., and Watson, W. W., production of liquid nitrogen, I, 421.
- Lane, J. F., Willenz, J., Weissberger, A., and Wallis, E. S., molecular rearrangements involving optically active radicals. VIII. Wolff rearrangement of optically active diazoketones, II, 279.
- Lane, J. T. See Freudenberg, K.
- Lane, M. M., and Jansen, C. H., stimulation of rat skin respiration by ultra-violet irradiation *in vivo*, III, 529. See also Loofbourow, J. R.
- Landford, O. E., and Kiehl, S. J., heterogeneous equilibria in aqueous solutions of sulphates of quinquivalent vanadium at 30°, I, 361.
- Lang, E. H. See Reiner, L.
- Lang, O. S. A. K., animal fatty acid dehydrogenase and its co-dehydrogenase. I., III, 344. and Mayer, H., animal fatty acid dehydrogenase and its co-dehydrogenase. II., III, 344.
- Lange, E. See Kellermann, A.
- Lange, F. F. See Korsunski, M. I.
- Langen, D., ultra-violet dosimeter readings, III, 530.
- Langenbeck, W., organic catalysts. XXI. Activation of organic catalysts, I, 326.

- Langenbeck, W., [with Gödde, O., and Weschky, L.], organic catalysts. XVIII. Synthesis of polycacetaldehydes as an example of main-valency catalysis, II, 188.
- Langendorff, H., and Papperitz, W., action of a single dose of X-rays on bone marrow in white mice, III, 184.
- Langer, A., amperometric titration of fluorine with thorium nitrate, I, 444.
- See also Kolthoff, I. M.
- Langer, L. M., Mitchell, A. C. G., and McDaniel, P. W., coincidences between β - and γ -rays in ^{24}Na , I, 4.
- See also Mitchell, A. C. G.
- Langer, R. M., mass of cosmic-ray particles, I, 384.
- Langert, P., essential thrombopenia, III, 880.
- Langvin, A., absolute value of principal piezoelectric modulus of quartz, I, 45.
- Langham, R., and Hallman, E. T., bovine kidney in health and disease, III, 41.
- See also Sholl, L. B.
- Langham, W. See Gilman, H.
- Langheim, R. See Juza, R.
- Langlois, J., and Morin, C., French official method of determining diastase; effect of various factors; method of determination, III, 261.
- Langley, L. L. See Hall, V. E.
- Langmann, A. G., and Bruch, H., carcinoma of thyroid gland in children, III, 28.
- Langmuir, I., monolayers on solids, I, 292.
- Langsdorf, A., jun., and Segrè, E., nuclear isomerism in selenium and krypton, I, 141.
- Langseth, A., and Bak, B., hindered rotation. I. Configuration of the cyclohexane molecule, I, 282.
- and Bernstein, H. J., hindered rotation. II. Hindered rotation about the C-C single bond in tetrachloroethane, I, 282.
- Bernstein, H. J., and Bak, B., hindered rotation. III. Qualitative nature of the interactions hindering internal rotation, I, 282. Hindered rotation in $\text{CH}_2\text{D}\cdot\text{CH}_2\text{Br}$, I, 383.
- Langstroth, G. O., spectrochemical studies of male hormones, III, 733.
- McRae, D. R., and Komarov, S. A., synthesis and secretion of protein material by the pancreas, III, 43.
- Talbot, N. B., and Fineman, A., spectrochemical assay of androsterone and dehydroisandrosterone in simple solutions, III, 131.
- See also Komarov, S. A., and Talbot, N. B.
- Langworthy, O. R., and Brack, C. B., effect of pregnancy and corpus luteum on bladder muscle, III, 128.
- and Hesse, F. H., anatomy and physiology of pseudobulbar palsy, III, 393.
- and Murphy, E. L., nerve endings in urinary bladder, III, 483.
- and Richter, C. P., increased spontaneous activity produced by frontal lobe lesions in cats, III, 111.
- See also Grimmer, R. V., Hesser, F. H., Rosenberg, S. J., and Vest, S. A.
- Lanier, R. R., presacral vertebrae of American white and negro males, III, 87.
- Lankelma, H. P. See Hovorka, F., and Selker, M. L.
- Lann, G. See Sondern, C. W.
- Lansbury, J., and Hughes, J., oestrin excretion in psychotic patients, III, 129.
- Clinical method for determining monthly output of oestrin from single bioassay on pooled night specimens of urine, III, 652.
- Lansing, W. See Wolfe, J. M.
- Lanyar, F., poisoning with the mushroom *Amanita pantherina*, D.C., III, 603.
- Lanzing, J. C. See Veen, A. G. van.
- Lapan, B. See Ehrlich, J. C.
- Lapicque, L., la chronaxie et ses applications physiologiques [chronaxic and its physiological applications], III, 370.
- Supposed active principle of curare, III, 604.
- and Lapicque, M., heterogeneity of the curares, III, 443.
- Lapicque, M. See Lapicque, L.
- Lapière, S., limiting zone between epidermis and dermis of man and embryonic sheep, III, 280.
- Lapin, J. H., Cohen, P., and Weichsel, M., prophylactic vaccination against whooping cough, III, 76.
- and Weichsel, M., unusual case of ephedrine poisoning, III, 249.
- See also Cohen, P., and Weichsel, M.
- Lapointe, C., and Rasetti, F., capture cross-section for thermal energy neutrons, I, 426.
- Laporta, M., adsorption of bile salts on serum-proteins, III, 343.
- and Miletto, P., testicular regeneration and testosterone, III, 131.
- Laporte, R., pathogenic and sensitising action of defatted tubercle bacilli, III, 356.
- Lapp, C., and Erali, K., two-dimensional chromatography, II, 294.
- Lapsley, R. W., Robertson, J., and Patterson, T. S., optical superposition. IX. l-Menthyl esters of mucic and tetrahydroxyadipic [1. 2. 3. 4.] acids, II, 297.
- Laquer, E. See Dingemans, E.
- Lardy, H. A., Pounton, W. D., and Phillips, P. H., pH of various fluids of genital tract of cow, III, 849.
- See also Moxon, A. L.
- Larionow, L. T., endocrine glands in experimental cancer induced by benzpyrene; rôle of endocrine glands in pathogenesis of tumours, III, 588.
- Larizza, P., effect of posterior pituitary extracts on blood-chloride, III, 406.
- [Serum] non-protein-nitrogen. I.—III, III, 882.
- Lark-Horovitz, K., and Miller, E. P., structure of liquid argon, I, 431.
- See also Ehrhardt, C. H., and How, T. G.
- LaRocco, C. G., sulphapyridine dermatitis, III, 921.
- Larsen, E. C., and Walton, J. H., activated carbon as a catalyst in oxidation-reduction reactions, I, 168.
- Larsen, E. S., 3rd, overite, a new mineral from Fairfield, Utah, I, 240. Overite and montgomeryite: two new minerals from Fairfield, Utah, I, 380.
- Larsen, J., and Poe, C. F., solubility of pancreatic amylase in organic solvents, III, 348.
- Larsen, R. M. See Kampmeier, R. H.
- Larson, C. E., use of sodium hexametaphosphate as anti-coagulant, III, 839.
- See also Greenberg, D. M.
- Larson, C. P., modification of Masson's tetrachrome stain for routine paraffin sections of tissue fixed in solution of formaldehyde and saline solution, III, 467.
- Keller, W. N., and Manges, J. D., accidental canine thallotoxicosis; dangers of thallium used as rodenticidal agent, III, 761.
- Larson, E., fate of the injected oxytocic principle of posterior pituitary in anaesthetised cats and dogs, III, 64.
- Larson, H. W. See Blatherwick, N. R.
- Larson, P. S., and Brewer, G., mechanism of depression of serum-potassium by anaesthetics, III, 63.
- See also Brewer, G., and Cutting, R. A.
- Larson, R. See Arnold, R. T.
- Larson, R. H., and Walker, J. C., mosaic disease of cabbage, III, 358.
- Larson, W. D., mercurous bromide electrode, I, 258.
- Larson, W. P., Bieter, R. N., Levine, M., and McLimans, W. F., temperature reactions in mice infected with pneumococci, III, 330.
- See also Bieter, R. N., and Levine, M.
- Larsson, A., and Liljedahl, I., determination of pyruvic acid in blood, III, 630.
- See also Carlström, B.
- Larsson, E., decomposition of thionylid-acetic acid in acid aqueous solution, I, 167.
- Larsson, P. A., and Sveinsson, S. L., determination of galactose in blood, III, 562.
- La Rue, C. D. See Avery, G. S., jun.
- Lasareff, V., and Roskam, J., detection of adsorbed proteins on the surface of solids, III, 259.
- See also Roskam, J.
- Laschakov, L. M., equilibrium $2\text{H}_2 + \text{CO} \rightleftharpoons \text{CH}_3\text{OH}$, I, 213.
- Lasher, E. P., jun., and Glenn, F., effects on kidney and blood pressure of artificial communication between renal artery and vein, III, 192.
- Lasnitzki, A., potassium and carbohydrate metabolism, III, 754.
- Lassek, A. M., and Rasmussen, G. L., human pyramidal tract: a fibre and numerical analysis, III, 298. Fibre analysis of pyramidal tract, III, 719.
- Last, J. H., and Geiling, E. M. K., inactivation of melanophore hormone by cancer serum, III, 508.
- See also Oldham, F. K.
- Laszlo, D. See Lewisoyn, R.
- Laszt, L., action of pyruvic acid on adrenalectomised rats, III, 29. Influence of lactate on absorption of glucose from the intestine of adrenalectomised rats, III, 38. Influence of sodium chloride on glucose absorption from intestine of iodoacetate-poisoned rats, III, 38. Intestinal sugar absorption and phosphate metabolism, III, 742.
- Latham, R. See Hurst, D. G.
- Latimer, P. H., and Bost, R. W., sulphur studies. XV. Synthesis of alkanesulphonic acids and derivatives, II, 117.
- Latimer, W. M., and Slansky, C. M., ionic entropies and free energies and entropies of solvation in water-methanol solutions, I, 413.
- See also Coulter, L. V.
- Latin, A., structure of liquid metals: a review, I, 431.
- La Towsky, L. W. See MacQuiddy, E. L., and Tollman, J. P.

- Lattimore, J. L., Gold, A., and Ebendorff, H. C., Wilhelmj test meal, III, 499.
- Latz, L. See Haag, F. E.
- Laube, A. See Garrett, A. B.
- Laubender, W., theory of potential poison action in pharmacology, III, 339.
- and Mertz, B., action of acetylcholine on isolated guinea-pig uterus, III, 679.
- Laubengayer, A. W., Billings, O. B., and Newkirk, A. E., chlorogermanic acid and the chlorogermanates; properties and crystal structure of caesium hexachlorogermanate, I, 229.
- and Schirmer, F. B., gallium chlorides, I, 369.
- Lauer, H. J., Hildebrand, E., and Burgmann, P., epiphyseal changes in rats on vitamin-A-free diet, III, 143.
- Lauda, E. See Brugsch, T.
- Lauder, W. B. See Kaufmann, H. J.
- Laudermilk, J. D., and Woodford, A. O., hydrous iron sulphide in California crystalline limestone, I, 379.
- Laudon, J., and Sjögren, B., sulphathiazole, II, 291.
- Laue, J. G., Shelden, C. H., and Kernohan, J. W., tumour of the hypophyseal duct (Rathke's cysts), III, 730.
- Lauer, N., influence of the central nervous system on inflammatory reactions. IV. Influence of cord-section on non-specific inflammation, III, 113.
- Lauer, W. M., and Hansen, L. I., rearrangement of phenyl allyl ethers. III. Synthesis of α -o-anisylpropionic acid, II, 15.
- and Leekley, R. M., rearrangement of phenyl allyl ethers. IV. Examination of the pyrolysis product of phenyl allyl ether for evidence of p -rearrangement. V. Isomeric ethyl p - α - and γ -propylallyloxybenzoates, II, 12, 15.
- Sanders, P. A., Leekley, R. M., and Ungnade, H. E., ethers of p -hydroxybenzoic acid as derivatives for identification of alkyl halides, II, 16.
- and Ungnade, H. E., rearrangement of phenyl allyl ethers. VI. Isomeric ethyl p - α - and γ -ethylallyloxybenzoates, II, 15.
- See also Smith, L. I.
- Lauffer, M. A., and Price, W. C., thermal denaturation of tobacco mosaic virus, III, 456.
- and Stanley, W. M., sedimentation rate of bushy stunt virus, III, 938.
- Laug, E. P., and Morris, H. J., toxicity of ortho, meta, and para isomerides of sulphanilamide, III, 332.
- Launer, H. F., thermopile, I, 234.
- Laurent, P. See Kirmann, A.
- Laurentiev, V. N. See Grünberg, A. A.
- Lauridsen, L. W. See Hess, K.
- Lauritsen, C. C. See Fowler, W. A.
- Lauritsen, T. See Bostrom, K. J.
- Laustsen, O. See Winge, O.
- Lauter, W. M., and Vrla, V. L., toxicity of triethylene glycol and effect of sulphanilamide, III, 338.
- Lautsch, W. See Freudenberg, K.
- Lavender, H. M. See Sage, B. H.
- Laves, F., influence of strain on arrangement of quartz and cristobalite crystallites in chaledony, quartzine, and lussatite, I, 85.
- and Wallbaum, H. J., crystal chemistry of titanium alloys, I, 67.
- Laves, W., poisoning with lead tetraethyl, III, 252. *Xenopus laevis*, Daudin, pregnancy test, III, 661.
- Laviates, P. H. See Rosenbaum, J. D.
- Lavin, G. I., application of ultra-violet absorption spectroscopy to biology and medicine, III, 696.
- Hoagland, C. L., and Ward, S. M., ultra-violet absorption spectrum of cytochrome-c, III, 765.
- See also Spencer, E. L., and White, A.
- Lavrenova, V. V. See Naumov, S. N.
- Lavrov, B. A., and Jarusova, N. S., nitrogen metabolism of birds and vitamin-B₁; effect of variations in nutrition, III, 144.
- Lavrov, V. See Alberg, W.
- Law, J. L., treatment of megacolon with acetyl- β -methylcholine bromide, III, 851.
- Parasympathetic drugs in megacolon, III, 908.
- Law, L. W., production of tumours by injection of carcinogen into amniotic fluid of mice, III, 421.
- and Lewisohn, M., induction of lymphomatosis in mice following painting with 9 : 10-dimethyl-1 : 2-benzanthracene, III, 505.
- See also Snell, G. D.
- Lawler, H. J., passive transfer of immunity to *Strongyloides ratti*, III, 456.
- See also Atkinson, E. R.
- Lawrence, A. S., Needham, J., and Shen, S. C., relations between molecular and morphological shape of protein solutions, III, 763.
- Lawrence, C. A., bacteriostatic action of three thiazole derivatives of sulphanilamide on bacteria in broth cultures, III, 521. Bacteriostatic effects of sulphanilamide, pyridine, and thiazole derivatives on colon-typhoid-dysentery group, III, 756.
- Lawrence, E. A. See Oughterson, A. W.
- Lawrence, E. C. See Hahn, P. F.
- Lawrence, J. H., treatment of leukaemia and polycythemia with radioactive phosphorus, III, 879.
- See also Anderson, E., and Jones, H. B.
- Lawrence, J. M., Tuttle, L. W., Scott, K. G., and Connor, C. L., studies on neoplasms with aid of radioactive phosphorus. I. Total phosphorus metabolism of normal and leukaemic mice, III, 507.
- Lawrence, J. S., Syverton, J. T., Shaw, J. S., and Smith, F. P., infectious feline agranulocytosis, III, 790.
- See also Ackart, R. J.
- Lawrence, R. D., renal threshold for glucose, III, 812.
- Lawrence, W. J. C., and Price, J. R., genetics and chemistry of flower colour variations, III, 369.
- Scott-Moncrieff, R., and Sturgess, V. C., *Streptocarpus*. I. Genetics and chemistry of flower colour in garden strains, III, 81.
- Lawrenz, M., Mitchell, H. H., and Ruth, W. A., comparative toxicity of fluorine in calcium fluoride and in cryolite, III, 336. Comparison of toxicity of fluorine in form of cryolite administered in water and in food, III, 336. Adaptation of the growing rat to ingestion of a constant concentration of fluorine in the diet, III, 913.
- Lawroski, S. See Whitmore, F. C.
- Lawson, A. W., variation of the adiabatic and isothermal elastic moduli and coefficient of thermal expansion with temperature through the λ -point transition in ammonium chloride, I, 201.
- Lawson, H. See Holt, J. P., and Merlis, J. K.
- Lawson, J. L., and Cork, J. M., radioactive isotopes of indium, I, 307. Internally converted γ -rays from radioactive gold, I, 427.
- and Tyler, A. W., magnetic β -ray spectrometer, I, 176.
- Lawson, W. See Campbell, N. R.
- Lawton, A. H. See Dragstedt, C. A., and Ramirez de Arellano, M.
- Lawton, E. J., vacuum leak testing, I, 273.
- Lawton, S. E. See Hey, D. H.
- Laymon, C. W., and Cumming, H., histaminase in treatment of urticaria and atopic dermatitis, III, 528.
- Layne, J. A., and Boyden, E. A., evacuation of gall bladder in patients with pernicious anaemia, III, 743.
- Lazard-Kolodny, S., inorganic constituents of rabbits' liver. I. Variation of total inorganic substances. II. Variation of potassium, sodium, and calcium, III, 221.
- Lazarev, B. G., Nachimovitsch, N. M., and Parfenova, E. A., electrical resistance of single crystals of zinc and cadmium in a magnetic field at low temperatures, I, 152.
- Lazarus, S. See Graham, J. D. P.
- Lazurievski, G. V., and Sadikov, A. S., chemical study of *Ammothamnus lehmannii*, Bge. I, II, 58.
- Lazzell, C. L. See Marsh, D.
- Lea, A. J. See Grüneberg, H.
- Lea, D. E., radiation method for determining number of genes in X-chromosome of *Drosophila*, III, 373. Determination of sizes of viruses and genes by radiation methods, III, 773.
- See also Kara-Michailova, E.
- Leach, B. E. See Forbes, J. C.
- Leach, E. H. See Carleton, H. M.
- Leader, G. R. See Glockler, G.
- Leah, A. S., latent energy and dissociation in explosions, I, 363.
- Leahy, E. See Greene, C. H.
- Leary, T., subdural or intradural haemorrhages? III, 202.
- and Weiss, S., dissecting aneurysm of aorta in experimental atherosclerosis, III, 631.
- Lease, E. J., and Mitchell, J. H., effect of carbohydrates on determination of carotene, II, 319.
- Leatham, J. H., responses of hypophysectomised immature female rats to mare serum hormone, III, 403.
- and Crafts, R. C., progestational action of deoxycorticosterone acetate in spayed adrenalectomised cats, III, 846.
- and Westphal, U., influence of chlorophyll on activity of gonadotropic extracts tested on normal and hypophysectomised immature female rats, III, 900.
- See also Starkey, W. F.
- Leavitt, J. J. See Barrett, P. A.
- Leavy, S. See Ackart, R. J.
- LeBaron, I. M., and Choppin, A. R., irreversible electrode phenomena of thallium. I. Hydrogen overvoltage in sulphuric acid, I, 119.
- Lebbink, H. O. See Jorissen, W. P.
- Lebduška, J., and Pidra, J., antiseptic power of pine oil, III, 773.
- Le Bean, D. S. See Hauser, E. A.
- Le Bean, J. See Bonvallet, M.
- Lebedeva, A. I. See Freidlin, L. C.
- Lebedeva, L. See Derjaguin, B.

- Lebedeva, M. See Istschenko, J.
- Lebedinski, V. V., and Golovnia, V. A., compounds of platinum [salts] with acetonitrile, I, 267.
- and Miasojedov, N. N., rhodium sulphito-ammines, I, 266.
- and Simanovski, P. V., compounds of iridium [salts] with acetonitrile, I, 266.
- Lebel, H. See Muus, J.
- Lebensohn, J. E., biochemistry of lens, III, 844.
- Leberman, P. R. See Johnson, S. H.
- Lebish, J., thallium sulphate poisoning in dog, III, 760.
- Leblond, C. P., Selye's "alarm reaction," III, 139. Lactation fever and nest formation in rat, III, 658.
- Lecco, A. M., and Dimitrijevič, D. M., 2,3-bis-(2'-benzimidazolyl)pyridine, II, 315.
- Lecky, H. S., and Ewell, R. H., spiral screen packing for efficient laboratory fractionating columns, I, 446.
- Leclerc, E. See Batta, G.
- Lecoin, M. See Perey, (Mlle.) M.
- Le Compte, G. C. See Greely, J. W.
- Le Compte, P. M. See Winternitz, M. C.
- Lecomte, J., infra-red absorption spectra of mono-substituted naphthalenes; symmetry of naphthalene, I, 7.
- See also Volkringer, H.
- Lecoq, H., apparatus for Kjeldahl determination of nitrogen, I, 272.
- Lecoq, R., effect of alimentary fatty unbalance on composition of pigeon muscle and blood, III, 591. Determination of ketonic substances in muscle, III, 713.
- Lecreq. See Andrieux.
- Lederer, E., pigments of invertebrates (excepting respiratory pigments), III, 746.
- See also György, P.
- Lederer, J., comparative study of liberation of iron from egg yolk by normal gastric juice and that of subjects with hypochromic anemia with achylia and with pernicious anemia, III, 309. Scrumion in pernicious anemia treated by liver, III, 468.
- Lederer, L. G., and Bing, F. C., calcium, phosphorus, and lead retention, III, 856.
- Lederer, M. See Gray, I.
- Ledingham, J. C. G., immunisation against infectious diseases, III, 269. Sex hormones and Foa-Kurloff cell, III, 657.
- Ledoux, A. See Grüneberg, H.
- Ledrut, J., action of yeast extract on carbohydrate metabolism, III, 433.
- Lee, A. H., excitation of inner electrons in zinc, cadmium, and mercury by electron impact, I, 143.
- Lee, A. R., and Warren, J. B., conical-cylindrical viscosimeter for measuring the visco-elastic characteristics of highly viscous liquids, I, 236.
- Lee, C. E., Hamilton, S. W., Henry, C. L., and Callanan, M. E., effect of supplementary heat on egg production, feed consumption, amount of litter required, and net flock income, III, 314.
- Lee, D. D. See Addis, T.
- Lee, D. H. K., and Courtice, R., assessment of tropical climates in relation to human habitations, III, 605.
- Lee, E., and Wu, C. K., infra-red absorption spectra of arsine, deuterarsine, and deuterophosphine, I, 56.
- See also Sutherland, G. B. B. M.
- Lee, E. C. See Glattfeld, J. W. E.
- Lee, H. M., and Chen, K. K., alkaloids of Chinese drug *pai pu*, II, 383. Action of gelsemicine on acid-base balance in rabbits, III, 444.
- and Swanson, E. E., haemolytic action and chemical structure of barbituric acid derivatives, III, 926.
- Lee, J. See Foster, R. H. K.
- Lee, J. S. See Tsai, C.
- Lee, K., and Wu, H., isolation of antibody from agglutinate of type I pneumococcus by treatment with acid, III, 541.
- Lee, L. See Chang, H.
- Lee, L. Y., mechanism of [skeletal muscle] sensitisation to acetylcholine by denervation, III, 109.
- and Meng, C. W., neuromuscular transmission in turtle, III, 636.
- Lee, M., and Freeman, W., liver growth in rats treated with anterior pituitary growth hormone, III, 404.
- and Richter, D., liver-amylase and hyperglycemia, III, 417. Adrenaline hyperglycemia, III, 498.
- See also Fevold, H. L.
- Lee, N. See Sugawara, S.
- Lee, O. I. See Northrup, M. A.
- Lee, O. S., and Rottenstein, H., sulphonamides in trachoma, III, 921.
- Lee, R. C., basal metabolism of the adult rabbit and prerequisites for its measurement, III, 431. Size and basal metabolism of the adult rabbit, III, 431. Rectal temperature and metabolism of the wild cottontail rabbit, III, 517.
- Lee, S., dielectric study of synthetic highly polymerised compounds in organic liquids. I—III. Dielectric study of benzene solutions of mono- and polychloroprene, mono- and poly-vinyl acetate, and mono- and poly-styrene, I, 410.
- Lee, S. W., and Dougherty, G., thiomethylene radical. II. Behaviour with chlorine and water, II, 151.
- Leech, B. C., and Griffith, H. R., cyclopropane—unmixed, III, 602.
- Leech, J. G. C. See Brammall, A.
- Leedham-Green, J. C., transfusion with stored blood, III, 92.
- Leekley, R. M. See Lauer, W. M., and Smith, L. I.
- Leemann, A., sparking potential in deuterium and hydrogen, I, 183.
- Leendertse, J. J., and Scheffer, F. E. C., essential corrections in gas analysis, I, 130.
- See also Waterman, H. I.
- Lees, G. M., and Richardson, F. D. S., geology of the oil-field belt of S.W. Iran and Iraq, I, 397.
- Lees, H. See Gridgeman, N. T.
- Lees, R. See Batchelor, R. C. L.
- Leese, A. See Black, D.
- Lefèvre, J., similarity of action of anethole and the colchicine group on plant mitosis, III, 693.
- Le Fèvre, R. J. W. See Caldwell, C. C.
- Legg, J., and White, C. T., *Hoya australis* (wax flower), a native plant poisonous to stock, III, 443.
- Legge, J. W. See Lemberg, R.
- Leggett, E. L., and Robinson, K. W., chemical determination of vitamin-C, with analyses made on some Queensland products, III, 916.
- Leggett, M. B. See Hauser, E. A.
- Legler, R. See Karrer, P.
- Legutke, G. See Hüchel, W.
- Lehman, E., and Rapaport, H. G., skin changes in vitamin-A deficiency in children, III, 427.
- Lehman, R. A. See Brightman, I. J.
- Lehmann, B. See Rippel, A.
- Lehmann, E., and Eisenhuth, F., pine bark. II, III, 367.
- Lehmann, G. See Burtner, R. R., and Krant, H.
- Lehmann, H., occurrence of action currents in nerves unaccompanied by heat transfer, III, 391.
- See also Holmes, E.
- Lehmann, S., L. Hill's nasal reflex and its significance in thermo-regulatory skin reflexes, III, 294.
- Lehmann, W. See Soskin, S.
- Lehrman, A., and Skell, P., acetometallates. II. Acetozincate, I, 117.
- See also Poppick, I.
- Lehrman, L., Been, J., and Manes, M., coprecipitation of barium ion with hydrous aluminium, chromic, and ferric oxides in the presence of ammonium ion, I, 329.
- Leibner, I. W. See Kaye, I. A.
- Leiboff, S. L., slide flocculation test for diagnosis of syphilis, III, 266.
- Leibowitz, J., and Hestrin, S., substrate specificity of yeast zymase, III, 609.
- Leicester, H. M., Alexander Mikhailovich Butlerov, I, 378.
- Leichenger, H., and Abelson, S. M., erythema neonatorum toxicum, III, 829.
- Leichsenring, J. M., Donelson, E. G., Wall, L. M., and Ohlson, M. A., evaluation of oxalate solutions for determination of packed cell volume in human blood, III, 6.
- See also Donelson, E. G.
- Leidenheimer, H., jun., and Boyce, F. F., serum volume index in newborn children, III, 704.
- Leifer, E., exchange of oxygen between NO and NO₂, I, 296.
- See also McCallum, K. J.
- Leifer, W. See Baehr, G., Hyman, H. T., and Peck, S. M.
- Leighton, B. See Barenberg, L. H.
- Leighton, H. W. See Getting, I. A.
- Leighty, J. A., and Wick, H. J., diethylstilbestrol compared with oestron, III, 213.
- Leimgruber, C., primordial cranium of *Centes ecaudatus*, III, 372.
- Leiner, V. M., respiration enzyme carbonic anhydrase in animal body, III, 765.
- Leinfelder, P. J., retrograde degeneration in optic nerves and tracts; changes in axis cylinders, III, 804.
- Leipper, A. See Kobe, K. A.
- Leipunski, A. I., and Jimoschuk, D., neutron scattering in normal and para-hydrogen, I, 3.
- See also Borisov, M. D., and Goloborodko, T.
- Leipunski, O. I., adsorption of a gas accompanied by its dissociation, I, 21.
- Leiter, L., clinical aspects of renal disease, III, 503.
- See also Eichelberger, L.
- Leitsmann, R. See Steinkopf, W.
- Lejeune, G. See Urion, E.
- Leclair, L. F. See Braun Menéndez, E., and Muñoz, J. M.
- Le Maistre, N. See Palmer, G. D.
- Léman, A., propionylation of naphthols in pyridine, II, 79. Determination of phenols by means of benzoic anhydride, II, 241.

- Leman, P. K., double decomposition in absence of a solvent. XLVIII. Mutual irreversible system of nitrates and sulphates of potassium and thallium. XLIX. Ternary system: sodium, potassium, and thallium nitrates, I, 413.
- Lemarchands, M., and Umana, E. M., action of chlorine on calcium oxide, I, 79.
- Lemay, L. See Plattner, P. A.
- Lemberg, R., and Legge, J. W., preparation of biliverdin, II, 359.
- Lemere, F., quinine in dystonia musculorum, III, 568.
- Lemmer, K. E., and Malec, J. P., drainage of common bile duct with resultant extrarenal azotemia, III, 666.
- Lemmerz, A. H., and Köddermann, O., hormonal treatment of ankylotic spondylo-arthritis, III, 402.
- Lemon, J. T. See Geake, A.
- Lemos, A., toxicological experiments on manganese, III, 64.
See also Cheramy, P.
- Lemoyne, S. See Colin, H.
- Lenci, E. See Boquet, A.
- Lendle, L., cumulative action of digitalis, III, 601.
See also Haarmann, W.
- Lendrum, A. C., new trichromic staining method, III, 180.
and McFarlane, D., controllable modification of Mallory's trichromic staining method, III, 467.
See also Kirkpatrick, J.
- Lenke, S. E. See Loewe, L.
- Lennard-Jones, J. E., problems of the solid state, I, 247. Liquid state, I, 435.
- Lennerstrand, A., and Lennerstrand, M., dephosphorylation of 2:3-diphosphoglyceric acid in hemolysed red blood corpuscles of horse, III, 449. Transfer of phosphate during oxidation of hexose diphosphate in hemolysate of horse erythrocytes, III, 561.
- Lennerstrand, M. See Lennerstrand, A.
- Lennette, E. H., and Campbell, D. H., blood-central nervous system barrier permeability to horse serum in experimental poliomyelitis, III, 24.
See also Horsfall, F. L.
- Lennox, F. G., distribution of ammonia in larvae of *Lucilia cuprina*, III, 853.
and Hall, D. L., oil of citronella for protection of lambs against blowfly strike, III, 759.
- Lennox, W. G., drugs in epilepsy, III, 571.
- Gibbs, E. L., and Gibbs, F. A., inheritance of epilepsy, III, 23.
See also Gibbs, E. L., Nims, L. F., and Williams, Denis.
- Lenti, C., esterase activity of benzoyl-carbinol, II, 34. Glycolysis in retina, III, 203.
See also Mazza, F. P.
- Leo, S. See Prinzmetal, M.
- Leonard, E. R., tropical fruits. VI. Solubility of gases in relation to respiration, III, 82.
See also Wardlaw, C. W.
- Leonard, O. A., carbohydrate transformations in leaf blades with special reference to sucrose synthesis, III, 458.
- Leonard, R. D. See George, A. W.
- Leonard, S. L., and De Frates, J., relation of thyroid and hypophysis to ovarian responses of menopause urine extracts, III, 407.
See also Allison, J. B., and Reece, R. P.
- Leonhardt, J., polymorphism and growth in solid phases, I, 433.
- Leonian, L. H., and Lilly, V. G., nutrition of fungi. II. Effect of inoculum on growth of colony. IV. Factors influencing the growth of some thiamin-requiring fungi, III, 351, 868.
- Leonteeva, A. A., viscosity of system $B_2O_3-SiO_2$ and calculation of activation energy for vitreous systems, I, 19. Activation energy for ionic liquids, I, 198.
See also Volarovitsch, M. P.
- Leontieva, E. V. See Naumov, S. N.
- Leontovitsch, M. A. See Schaposchnikov, I. G.
- Léopold, A., determination of heat evolution of reactions at high temperature and pressure, I, 330.
- Le Page, G. A. See Pett, L. B.
- LePage, W. R., and DuBridge, L. A., electron emission into dielectric liquids, I, 351.
- Lepape, A., and Geslin, M., radioactivity of the hydromineral springs of Châtel-Guyon (Puy-de-Dôme); springs very rich in thoron, I, 178.
- Lepeschkin, E., interpretation of normal and pathological electrocardiogram, III, 631.
See also Freundlich, J.
- Lepeschkov, I. N., boron content of the salt deposits in the south basin of the Permian Sea and in the salt lakes of the Caspian Lowlands, I, 44.
and Schpikelman, A. I., distribution of boron between liquid and solid phases of the Inder Lake brines during isothermal evaporation, I, 207.
- Lepeschkin, V. V., high-molecular organic complexes and their change in plant cells and tissues, III, 363.
- Lepin, L., and Bromberg, A., coagulation of hydrophobic sols by mixed electrolytes. III. Influence of properties of univalent cations, I, 213.
- Lepkovsky, S. See Fouts, P. J.
- Leplat, G., modern conceptions in embryology, especially regarding development of the eye, III, 488.
- Lepsoe, R., sulphur dioxide reduction; kinetics, I, 366.
- Lerche, types of *Bacterium enteritidis*, Breslau, III, 453.
- Lerche, E. See Heite, H. J.
- Leriche, F. See Péhu, M.
- Leriche, R., physiologie et pathologie du tissu osseux [physiology and pathology of bone], III, 276.
- Lerman, C. N. See Konikov, A. P.
- Lerman, J., circulating thyroglobulin in normal persons and in persons with thyroid disease, III, 725.
and Salter, W. T., relief of myxœdema with proteins of extra-thyroidal origin, III, 208.
- Lerner, H. H., and Rapaport, H. G., biophotometric studies in 30 cases of chronic ulcerative colitis, III, 39.
- Lerner, M. W. See Durfee, T.
- Leroux, H. See Guillemet, R.
- Leroux, M. See Hubert, C.
- Le Roy, D. J. See Allgood, R. W.
- LeRoy, G. V., and Speer, J. H., comparison of the coronary vasodilator activity of alkylxanthines, III, 680.
- Lesbre, M., application of Meyer's reaction to lead, II, 247.
- Lescher, F. G., Osborn, G. R., and Bates, J. J. G., atypical hæmolytic anæmias, III, 282.
- Leschewski, K. [with Degenhard, W.], thermal decomposition of sodium and potassium nitrate, I, 124.
See also Möller, H.
- Le Sech, E., preparation of salicylates of primary alcohols, II, 373.
- Leser, A. J., effect of quantity on intensity and duration of local anesthesia, determined by a new test, III, 525.
- Leshin, N. See Lewy, A.
- Leslie, A., acetanilide poisoning, III, 337.
- Mulinos, M. G., and Scott, W. S., jun., effect of anoxæmia on electrocardiogram of cats after coronary ligation, III, 15. Coronary occlusion. II. Efficacy of papaverine hydrochloride in treatment of experimental cardiac infarction, III, 841.
See also Mendlowitz, M.
- Leslie, J. T. See Burpee, C. M.
- Lespagnol, A., Bertrand, J., and Dupas, J., preparation of substituted xanthenes, II, 102.
and Bizard, G., pharmacodynamic study of phenyltyramine, III, 522.
- Bizard, G., and Turlur, J., chemistry and pharmacodynamics of diarylethanolamines, III, 923.
- Lespieau, R., preparation of α -epoxides, II, 150.
- Lester, J. G., garnet segregations in granite gneiss of Dekalb Co., Georgia, I, 180.
- Lesure, A., determination of amines in blood; colorimetric determination of histamine, tyramine, and tryptamine index of serum, III, 471.
- Letonoff, T. V., and Reinhold, J. G., colorimetric determination of lead chromate by diphenylcarbazide; determination of lead in blood, tissues, and excreta, III, 780.
- Letterer, E., chromium silicosis, III, 159.
- Leubke, E. A. See Manley, J. H.
- Leuchs, H., and Boit, H. G., strychnine alkaloids. CIX. Reaction of the nitroquinone from *N*-methyl- ψ -brucine; other nitroquinones of this series, II, 316.
and Louis, H. L., *Strychnos* alkaloids. CVIII. Catalytic hydrogenation of dibromohydroxynucine and related C_{17} compounds, II, 144.
- Leuchtenberger, C. See Lewisohn, R.
- Leuchtenberger, R. See Lewisohn, R.
- Leulier, A., and Dorche, J., oxalic acid content of blood, III, 381.
- Leupold, E., influence of section of nerves on serum absorption by ears of normal and sensitized rabbits, III, 385.
- Leusden, F. P., and Erichsen, H., inhibition of spore development by alcohol, III, 450.
- Leutscher, J. A., electrophoretic analysis of plasma- and urinary proteins, III, 471.
- Leutze, E. See Tsutsulopulos, G.
- Lev, M. See Hechter, O.
- Leva, E., colorimetric micro-determination of sodium with manganous uranyl acetate, I, 173.
and Guest, G. M., determination of total base (sum of sodium, potassium, calcium, and magnesium) in blood, III, 97.
- Levaditi, C., and Reinié, L., irreversible virulicide action of formaldehyde on corpuscular elements of neurovaccine, III, 268.

- Levaditi, C., Reinié, L., Stamatini, L., Le-Van-Sen, L., and Bequignon, R., vaccinia virus and fluorescence. I, III, 690.
- Levaditi, J., and Giuntini, J., streptococci isolated from war wounds; biochemical characters; biological variations of different strains caused by sulphamide derivatives, III, 541.
- Le-Van-Sen, L. See Levaditi, C.
- Levene, P. A., methylation of chondrosamine hydrochloride, II, 245.
- See also Ovakimian, G., Rothen, A., and Tipson, R. S.
- Levenson, H. S., and Smith, Hilton A., saponification of ethyl esters of aliphatic acids, I, 364. Kinetics of saponification of ethyl esters of several phenyl-substituted acids, I, 415.
- Levenson, L. H. See Barrett, C. S.
- Levenson, S., and Grabar, P., ultrafiltration of toxin of *B. perfringens* type C, III, 612.
- See also Grabar, P.
- Levenstein, I. See Gordon, A. S., and Vollmer, E. P.
- Lever, W. F., iodocholeate: a new fungicidal preparation, III, 61.
- and Massie, W. K., Laughlin test in diagnosis of syphilis, III, 76.
- and Talbott, J. H., rôle of vitamin-C in cutaneous diseases, III, 594.
- See also Talbott, J. H.
- Leverenz, H. W., relative emission spectra of zinc silicates and other cathodoluminescent materials, I, 386.
- Leverett, M. C., capillary behaviour in porous solids, I, 409.
- Leverkus, H. See Zintl, E.
- Levesque, C. L. See Marvel, C. S.
- Levi, G., regenerative reactions of neurones cultured *in vitro*, III, 4.
- Levi, H., radio-sulphur, I, 278.
- Levi, H. B. See Hevesy, G. C.
- Levin, B. S., mechanism of attenuation of *Bacterium typhi murium* by lecithin; effect of oxygen tension in the culture medium, III, 455.
- Levin, M. B. See Roseman, R.
- Levin, R. H., and Spielman, M. A., mercuration of cholesterol, II, 239.
- Levina, R. J., isomerisation of unsaturated hydrocarbons in contact with oxides of metals. III. Comparison of activity of catalysts in isomerisation of allylbenzene, I, 225.
- and Kiriuschov, P. J., isomerisation of unsaturated hydrocarbons in contact with oxides of metals. II. Isomerisation of diallyl in presence of chromic oxide, II, 147.
- Levina, S. See Jermolenko, N. F.
- Levine, D. B., and Michelson, H., parathyroid hormone in thrombopenic purpura, III, 880.
- Levine, H., and Bodansky, M., determination of paraldehyde in biological fluids, III, 550.
- Gilbert, A. J., and Bodansky, M., effect of liver damage on blood level and action of paraldehyde, III, 154.
- Pulmonary and urinary excretion of paraldehyde in normal dogs and in dogs with liver damage, III, 863.
- Piltz, G. F., and Reznikoff, L., electrocardiographic studies in metrazol [shock], III, 290.
- See also Greene, J. A.
- Levine, J. See Matchett, J. R.
- Levine, M., Larson, W. P., and Bieter, R. N., active immunity to pneumococci in rabbits protected by sulphapyridine, III, 331.
- See also Bieter, R. N., and Larson, W. P.
- Levine, M. I. See Rosenberg, H. A.
- Levine, N. D., determination of apparent isoelectric points of cell structures by staining at controlled reactions, III, 866.
- See also Graham, R.
- Levine, P. P. See Olson, C.
- Levine, R., and Kirsner, J. B., evaluation of phenolphthalein test of Woldman [for presence of gastro-intestinal lesions], III, 310.
- See also Hechter, O., Soskin, S., and Taubenhaus, M.
- Levine, S., and Dube, G. P., stability properties in hydrophobic sols; application of the mutual energy of two particles, I, 111. Mutual electrical energy of two colloidal particles: general theory, using approximate Debye-Hückel equation, I, 160.
- Levine, S. A. See Rosenbaum, F. F.
- Levine, S. Z., Marples, E., and Gordon, H. H., defect in metabolism of aromatic amino-acids in premature infants: rôle of vitamin-C, III, 435.
- See also Gordon, H. H.
- Levinson, A., Kaplan, I., and Cohn, D. J., changes in chemistry of cerebrospinal fluid during encephalography, III, 202.
- and Zeldes, M., lead intoxication in children, III, 252.
- See also Kaplan, I.
- Levinson, L., diurnal variation of intermedin in rat blood, III, 731.
- Levinson, S. A. See Klein, R. I.
- Levinson, S. O., and Cronheim, A., suppression of iso-agglutinins, III, 788.
- Neuwelt, F., and Necheles, H., human serum as blood substitute, III, 378.
- See also Kauffman, S. A.
- Levisohn, I. See Rayner, M. C.
- Levitas, M. S., tender points in diseases of renal pelvis and ureter, III, 666.
- Levitina, Z. See Essin, O.
- Levitski, M. V. See Tatarinov, B. P.
- Levitt, A., and Jaskiewicz, S. J., clinical experience with crystalline insulin, III, 124.
- Levitt, H., bomb concussion and ear, III, 893.
- Levitt, R. O. See Volini, I. F.
- Levkoev, I. I. See Sveschnikov, N. N.
- Levsehin, V. L. See Aljavidin, V. N.
- Levtschenko, V. M., geochemical characteristics of mineral waters of Northern Urals, I, 332. Chemical composition of Abastuman hot springs, I, 332. Achtal volcanic mud, I, 333.
- Levvy, G. A., determination of barbiturates in blood, III, 275.
- Levy, E. D. See Sarett, H. P.
- Levy, F. See McGee, L. C.
- Levy, H. A., nitritoid reaction to tryptamide, III, 603.
- Lévy, J., bio-assay of small quantities of papaverine, III, 522.
- Levy, S. E. See Blalack, A.
- Lévy-Bruhl, M., and Courtois, J., immunology of mucoid bacilli (*Pneumobacillus*), III, 612.
- and Noël, N. G., ethyl alcohol as a source of carbon for Friedländer's bacillus, III, 263.
- Levy-Wolff, L., pathogenesis of retinitis pigmentosa (sclerosis pigmentosa chorioretinalis). I, III, 398. Pathogenesis of retinitis pigmentosa (sclerosis pigmentosa chorioretinalis). II. Local symptomatology, III, 574.
- Lew, W. See Addis, T., and Poo, L. J.
- Lewald, J. See Werner, A. A.
- Lewin, M. See Bialaszewicz, K.
- Lewinsky, W., and Stewart, D., innervation of gum of *Talpa europea*, III, 4.
- See also Stewart, D.
- Lewis, A. E., and Field, J., jun., respiration of kidney cortex in high-potassium-low-sodium Ringer's solution, III, 909.
- Lewis, A. H., and Marmoy, F. B., nutrient uptake by tomato plants, III, 361.
- See also McBain, J. W.
- Lewis, B., and Bradstreet, R. B., determination of unsaturation in aliphatic hydrocarbon mixtures by bromine absorption, II, 318.
- Lewis, C. M. See Emerson, Robert.
- Lewis, D. T., physical properties of aliphatic acid anhydrides, I, 149. Relationship between the critical temperature, b.p., and parachor values of simple molecules, I, 285. Gravimetric determination of phosphate and vanadate, I, 444. Organic derivatives of sulphur, selenium, and tellurium. I, II, 308.
- Lewis, E. E., and Elderfield, R. C., synthesis of dialkylphenanthrenes; 3:5-dimethyl-, 5-methyl-2-ethyl-, and 5-methyl-3-ethyl-phenanthrene; abnormal selenium dehydrogenation of strophanthidin, II, 248.
- Lewis, G. L., and Smyth, C. P., dipole moments and structures of ozone, silicobromoform, and dichlorogermene, I, 10. Dipole moments and structures of nitro-compounds and amines, I, 10. Internal rotation and dipole moment in succinonitrile, I, 59. Dipole moments and structures of esters of fatty and inorganic acids, I, 347.
- See also Brooker, L. G. S., and Smyth, C. P.
- Lewis, G. N., and Seaborg, G. T., acidity of aromatic nitro-compounds towards amines; effect of double chelation, II, 369.
- Lewis, G. T. See Basinski, D. H.
- Lewis, H. See Prinzmetal, M.
- Lewis, H. B., vitamin in theory and practice, III, 426.
- Schultz, J., and Gortner, R. A., jun., dietary protein and toxicity of sodium selenite in the white rat, III, 319.
- See also Abbot, L. D., jun., Gortner, R. A., jun., and Schultz, J.
- Lewis, I. M., pure cultures of *Spirillum*, III, 869.
- Lewis, J. B., determination of sulphide-sulphur in alkaline solutions containing other sulphur compounds, I, 444.
- Lewis, J. M., and Haig, C., vitamin-A requirements in infancy as determined by dark adaptation, III, 427. Vitamin-A status of children as determined by dark adaptation, III, 574.
- Lewis, J. R., Hofer, L. J. E., and Whitehead, H., adsorption of hydrogen by copper dispersed in calcium oxide, I, 109.
- Lewis, J. T., diphtheria prophylaxis, III, 826.
- Lewis, L. A. See Hartman, F. A.
- Lewis, M. See Cooper, F. B., and Gross, P.
- Lewis, R. M., clinical use of stilboestrol, III, 655.
- Lewis, T. See Barthen, C. L.
- Lewis, W. B. See Hurst, D. G.

- Lewis, W. C. M. See Breese, D. I.
- Lewis, W. H., dibenzanthracene mouse sarcomas; histology, III, 226.
- Lewisohn, M. See Law, L. W.
- Lewisohn, R., Leuchtenberger, C., Leuchtenberger, R., and Laszlo, D., effect of intravenous injections of yeast extract on spontaneous adenocarcinomas in mice, III, 747.
- Lewthwaite, R., and Savor, S. R., rickettsia diseases of Malaya, III, 544.
- Lewy, A., and Leshin, N., functional examination of hearing, III, 400.
- Lewy, F. H., Himwich, H. E., Frostig, J. P., and Spies, T. D., effect of co-carboxylase on metabolism and neuro-psychiatric phenomena in pellagrins with beriberi, III, 52.
- Spies, T. D., and Aring, C. D., incidence of neuropathy in pellagra; effect of co-carboxylase on its neurologic signs, III, 717.
- See also Ehrlich, W. E.
- Ley, H., and Specker, H., fluorescence and absorption measurements with benzene derivatives, especially with condensed systems, I, 93.
- Leyns, W. F., Heringa, C., and Weidinger, A., water-binding capacity of cornea, III, 396.
- See also Heringa, G. C.
- Lhermitte, J., the bodily image, III, 620.
- Li, C. H., Evans, H. M., and Wonder, D. H., electrophoretic homogeneity of gonadotropic hormone from pregnant mare's serum, III, 810.
- Lyons, W. R., and Evans, H. M., electrophoretic study of pituitary lactogenic hormone, III, 405. Pituitary lactogenic hormone. I. Electrophoretic behaviour, III, 582.
- Lyons, W. R., Simpson, M. E., and Evans, H. M., essentiality of primary amino-groups for specific activity of lactogenic hormone, III, 405. Inactivation of pituitary lactogenic hormone by iodine, III, 900.
- Simpson, M. E., and Evans, H. M., action of keten on gonadotropic hormones, III, 650.
- Li, N. C. C., dipole variation of ether, I, 10.
- Li, P., intramural nervous system of small intestine, III, 483.
- Li, P. L., adaptation in veins to increased intravenous pressure with special reference to portal system and inferior vena cava, III, 194.
- Li, R. C., gonadotropic potency of gonadectomised rats' pituitary after tryptic digestion, III, 731.
- and P'an, S. Y., adrenal weight in rats living parabolically with adrenal-ectomised partners, III, 806.
- Li, S. C. See Ruff, O.
- Li, T. See Chang, H.
- Li, T. H. See Feng, T. P.
- Liaci, L., pharmacology of succinylsulphanilamide, III, 59. Sulphonamide preparations in treatment of biliary tract [infections], III, 59. Effect of eserine on insulin hypoglycaemia, III, 124. Effect of cinchonine on salivary secretion, III, 132. Effect of ergot on contraction of spleen, III, 249. Modification in effect of hypertensive and hypotensive drugs by alimentary canal and liver, III, 333. Pharmacology of glyceraldehyde. II. Toxicity and effect on blood circulation, III, 337. Effect of glyceraldehyde on muscle and uterus, III, 480.
- Lian, C., Frumusan, P., and Sassier, M., optical method for study of coagulation of blood, III, 185.
- and Minot, G., the Lian-Minot electrocardiograph, III, 14.
- Liang, M. S. See Chi, Y. F.
- Liatkovskaja, N. M., and Groschkov, G. V., neutron radiation of rocks, I, 237.
- Libby, W. F., mechanism of exchange reaction between gaseous bromine and hydrogen bromide, I, 295. Reactions of high-energy atoms produced by slow-neutron capture, I, 400.
- See also Randall, M.
- Libelli, G. M., effect of sympathetic nervous system on position and movement of vibrissæ, III, 24.
- Libérato, S. N. See Photakis, B. A.
- Liberatore, L. C., and Wiig, E. O., exchange reaction of gaseous bromine and hydrogen bromide, I, 221. Exchange reactions between gaseous alkyl bromides, bromine, and hydrogen bromide, I, 295.
- Liberman, L. A., bacteriophage in the sporiferous gas-producing *B. saccharolyticus* (n. sp.), III, 77.
- Libessart [with Culmann, and Penciolelli], detonation, I, 83.
- Liche, H., oestrous cycle in cat, III, 129.
- and Wodzicki, K., vaginal smears and oestrous cycle of cat and lioness, III, 129.
- Lichnitzkaja, I. I. See Sachs, M. G.
- Lichoscherstov, M. V., Archangelskaja, R. A., and Schalaeva, T. V., synthesis of β -bromo-ethers by the bromoamide method. I. Reaction of alcohols with benzenesulphondibromoamide in presence of olefines, II, 151.
- and Petrov, A. A., reaction of halogenoamides with acids in presence of olefines. I. Synthesis of esters of chlorohydrins of isomeric butenes. II. Reaction of benzenesulphondibromoamide with acids in presence of Δ^2 -butene, II, 151.
- Lichtenstein, A., sulphapyridine in pneumonia and broncho-pneumonia in children, III, 920.
- Lichtenstein, B. W., congenital absence of abdominal musculature, III, 698.
- Lichtenstein, I., number and range of dissociation of ionogenic groups and the dissociation curve of proteins, II, 263.
- Lichtenstein, M., cod-liver oil dressings, III, 248.
- Lichtenstein, M. R. See Feinberg, S. M.
- Lichtenstein, N., production of glutamine by amination of pyrrolidonecarboxylic acid, II, 140.
- Lichtenwalter, M., organometallic compounds of group VIII elements, II, 262.
- Lichterman, J. See Litchfield, H. R.
- Lichtman, S., influence of intravenous glucose injections on abnormal erythrocyte sedimentation speed in relation to activity of infection, III, 629. Modification of galactose-tolerance test based on differential fermentation of glucose occurring with galactose in urine, III, 918.
- Lida, E. See Marenzi, A. D.
- Lida y Zulema, E. See under Lida, E.
- Lidstone, A. G., separation of β -picoline, γ -picoline, and 2:6-lutidine from their mixture, II, 140.
- and Mills, W. H., optical activity dependent on the planar arrangement of the valencies of the 4-co-ordinated palladous atom, II, 8.
- Lidwell, O. M. See Bell, R. P., and Bourdillon, R. B.
- Lie, J. See Lunde, G.
- Lieb, C. W., health and nutrition of high Andean Indians, III, 18.
- Lieb, F., type differentiation in *Vibrio cholerae* and its relations, III, 773.
- and Vallender, B., amino-acid metabolism of resting staphylococci, III, 356.
- Lieberman, A., jun. See Beutner, R.
- Liebermann, L. N., rotational analysis of CS₂ bands in the near ultra-violet system, I, 386.
- Lieberson, A. See Goldbloom, A. A.
- Liebert, E., and Weil, A., histopathologic changes in brain following experimental injections of metrazol, III, 22.
- Liebhafsky, H. A., hydrolysis of bromine; hydration of the halogens; mechanism of certain halogen reactions, I, 120.
- and Sharkey, W. H., determination of organic peroxides, II, 122.
- Liebig, G. F., jun., all-glass still with automatic float feed, I, 274.
- Liebknecht, W. L., hydrolysis of adenylypyrophosphoric acid by bone phosphatase, III, 348. Decarboxylation of pyruvic acid, III, 350.
- Liebmann, H. See Crowther, J. A.
- Liebscher, W., relations between the reaction of the ash of pig foods and vitamin-A, III, 592.
- Liedholm, K., hypotonic uræmia in amyloid glomerular nephrosis with adrenal damage, III, 503.
- Liempt, J. A. M. van, and Wijk, W. van, rapid micro-gas-analysis of noble gas-nitrogen mixtures, I, 38.
- Liepatov, S. M., and Petrovskaja, L. V., lyophilic colloids. XVI. Ageing and gelatinisation of lyophilic colloids, I, 440.
- and Sokolov, I. I., electrochemical properties of lyophilic colloids. I. Electrometric determination of electrochemical equivalent and isoelectric point of gelatin fractions. II. Effect of temperature and dilution on electrical conductivity of gelatin fractions, I, 439.
- Liepmann, H. W., velocity of sound in liquid argon, I, 200.
- Lier, C. van. See Zernike, F.
- Liere, E. J. van. See under Van Liere, E. J.
- Liesegang, R. E., use of expectorants, III, 678.
- Lifschitz, I., and Bos, J. G., preparation and resolution of α - β -diphenylethylenediamine (stilbenediamine), II, 164.
- Lifschitz, L. S., changes in bile-cholesterol and bile acids in diseases of the liver, III, 40.
- Lifshitz, J. See Baños, A., jun.
- Lifson, N., absorption of chloride against concentration gradients from small intestines of rats and rabbits, III, 584.
- Light, A. E., DeBeer, E. J., and Cook, C. A., extracts of anterior pituitary growth hormone, III, 731. Biological assay of anterior pituitary growth hormone, III, 731.
- Light, R. U., technical suggestions in neurosurgery, III, 114.
- Lightbody, J. J. See Mayer, W. D.
- Lightfoot, C. C. See Duncan, C. W.
- Lightfoot, J. H. See Schoch, E. P.

- Lightoller, *G. H. S.*, comparative anatomy of mandibular and hyoid arches. I. Musculature. II. Comparative neurology. III. Columella and auditory ossicles, III, 833.
- Lightoller, *G. S.*, morphology of platysma, III, 463. Morphology of *M. caninus*, III, 463.
- Ligori, *M.* See Bocciarelli, *D.*
- Ligterink, *J. A.* See Klein, *F.*
- Liguori, *G.*, [effect of adrenal cortex on] lipin secretion by intestinal mucosa, III, 38.
- Lilga, *H. V.* See McCullagh, *E. P.*
- Liljedahl, *I.* See Larsson, *A.*
- Liljencrantz, *E.* See McFarland, *R. A.*
- Liljestrang, *A.*, and Lundsgaard, *E.*, utilisation of glucose and phosphate metabolism in hind-limb preparations of cats poisoned with phloridzin, III, 433.
- Liljestrang, *G.* See Euler, *U. S. von.*
- Lillie, *H. I.* See Prickman, *K. E.*
- Lillie, *R. D.*, Masson trichome modification of Mallory's connective tissue stain, III, 181. Biebrich-scarlet-picro-aniline-blue: new differential connective tissue and muscle stain, III, 626.
- and Earle, *W. R.*, iron hæmatoxylin containing ferric and ferrous iron, II, 702.
- and Smith, *M. I.*, histogenesis of hepatic cirrhosis in chronic food selenosis, III, 585.
- See also Roe, *M. A.*
- Lilly, *V. G.* See Leonian, *L. H.*
- Limarzi, *L. R.*, and Schleicher, *E. M.*, bone marrow in hæmorrhage and thrombopenic purpura, III, 281.
- See also Paul, *J. T.*
- Limaye, *D. B.*, condensation of ethyl acetoacetate with phenols and phenolic ethers. I. Synthesis of *p*-methoxy- and *p*-ethoxy- β -methylcinnamic acids, II, 129.
- and Bhawe, *V. M.*, reactivity of the methylene group in β -arylglutaconic esters. I, II, 130.
- and Gbate, (*Miss*) *I.*, synthesis in the coumarin- γ -pyrone group. III. Synthesis of 4:2'-dimethyl-8-ethyl-6:7- γ - and 4:4'-dimethyl-8-ethyl-6:7- α -pyronocoumarin, II, 139.
- Munje, *R. H.*, Shenolikar, *G. S.*, and Tatwalkar, *S. S.*, synthesis in the furocoumarin group. VI. Angular and linear furocoumarins, II, 139.
- See also Bhawe, *V. M.*, and Kelkar, *G. R.*
- Lin, *H. A.*, determination of urinary oestrogens in uterine hæmorrhage, III, 810.
- Lin, *H. A. C.*, and Isaacs, *R.*, production of neutropenia in Swiss mice by injection of dicarboxybenzanthrane, III, 703.
- Lin Ai-ch'ün, total urinary excretion of oestrogens during menstrual cycles of six normal women, III, 661.
- Linek, *K.*, changes in central nervous system caused by accidents due to electricity, III, 298.
- Lincoln, *R. E.*, bacterial wilt resistance and genetic host-parasite interaction in maize, III, 934.
- Lind, *S. C.* See Curtiss, *L. F.*
- Lindauer, *M. A.* See Jeffers, *W. A.*
- Lindberg, *B.* See Schlenk, *F.*
- Lindbergh, *C. A.*, culture flask for circulation of large quantity of fluid medium, III, 466.
- Linde, *W.* See Wieland, *H.*
- Linden, *B. A.* See Slocum, *G. G.*
- Lindenberg, *A.*, and Winternitz, *F.*, effect of molecular concentration of aqueous phase on the partition coefficient of isopropyl alcohol between water and oil, I, 157.
- Linderström-Lang, *K.*, and Holter, *H.*, distribution of enzymes in mucous membrane layers of gastro-intestinal tract of vertebrates, III, 343.
- and Jacobsen, *C. F.*, number of peptide linkages in insulin, III, 498.
- and Johansen, *G.*, reputed synthesis of protein by aëration of protein-proteinase digests. II, III, 686.
- See also Strain, *H. H.*
- Lindholm, *E.*, line widths of the HCl bands, I, 7.
- Lindholm, *H.*, vitamin-B group, III, 321.
- Lindley, *H. W.*, growth phenomena in diamond, I, 421.
- Lindman, *K. F.*, permeability of iron and nickel for Hertzian waves, I, 388.
- Lindner, *E.* See Katz, *L. N.*
- Lindner, *J. L.*, and Gruner, *J. W.*, action of alkali sulphide solutions on minerals at elevated temperatures, I, 47.
- Lindsay, *E.*, oxygen-carbon dioxide exchange of a silver-fish, III, 388.
- Lindsay, *J. R.*, petrous pyramid of temporal bone; pneumatization and roentgenologic appearance, III, 492.
- See also Kobrak, *H. G.*
- Lindwall, *H. G.* See Crawford, *R. B.*, and Surrey, *A. R.*
- Linegar, *C. R.*, modification of hæmodynamic effects of acetylcholine by ergotamine, III, 792.
- See also Coffey, *R. J.*, Hazleton, *L. W.*, and Koppanyi, *T.*
- Lineken, *E. E.*, conductance of solutions of organo-substituted ammonium chlorides in liquid hydrogen sulphide, I, 164.
- and Wilkinson, *J. A.*, conductance of solutions of organo-substituted ammonium chlorides in liquid hydrogen sulphide, I, 219.
- Linenthal, *A. J.* See Gilligan, *D. R.*
- Lingane, *J. J.*, influence of external resistance in the cell circuit on the maxima in polarographic current-voltage curves, I, 375.
- and Kolthoff, *I. M.*, polarographic study of reduction of chromate ion at the dropping mercury electrode, I, 258.
- Livingood, *F. V.*, alum-precipitated diphtheria toxoid, III, 263.
- Linhard, *M.*, and Betz, *K.*, cyanic acid. IV. Constitution of cyanic acid; carbamyl fluoride and bromide, II, 338.
- Link, *H. L.* [with Wood, *L. J.*], reactions between dry inorganic salts. V. Reactions below fusion point, I, 263.
- Link, *K. P.* See Dimler, *R. J.*, Karjala, *S.*, and Moore, *S.*
- Links, *A.*, and Rasko, *J.*, systemic and retinal blood pressure and intraocular tension, III, 203.
- Linn, *C. B.* See Grosse, *A. V.*
- Linnell, *W. H.*, and Roushdi, *I.*, keto-alcohols. I. α -Hydroxyketones, II, 119.
- and Sharma, *V. R.*, exploration of methods for preparing stilbene derivatives, II, 167.
- and Stuckey, *R. E.*, chemotherapeutic studies in the acridine series. VII. Hydroxy- and chloroalkoxy-derivatives of acridine, II, 331.
- Linnell, *W. H.* See also Hartley, *F.*
- Linnett, *J. W.*, calculation of force constants in methyl compounds, I, 99. Third law entropy of ethyl chloride, I, 218.
- See also Thompson, *H. W.*
- Linstead, *R. P.*, preparation of cholestanyl glucosides with all four possible configurations of the glucoside linking, II, 307.
- and Michaelis, *K. O. A.*, dehydrogenation. III. Formation of naphthols from alcohols and ketones of the hydronaphthalene group, II, 341.
- Michaelis, *K. O. A.*, and Thomas, *S. L. S.*, dehydrogenation. IV. Catalytic disproportionation and dehydrogenation of terpenes and terpene ketones, II, 351.
- and Rowe, *G. A.*, phthalocyanines and related compounds. XVII. Intermediates for the preparation of tetrabenzoporphins: acids derived from phthalimidine, II, 358.
- See also Barrett, *P. A.*, and Bnrnop, *V. C. E.*
- Lint, *A. van*, congenital miosis, III, 489.
- and Alaerts, cataract after sulphanyl-amide in a case of iridocyclitis, III, 397.
- Linton, *E. P.*, dipole moments of amine oxides, I, 403.
- Linton, *R. G.*, and Brownlee, *A.*, vitamin-A content of livers of healthy dogs, III, 320.
- Lion, *E. G.* See Kahn, *E.*
- Lions, *F.*, and Ritchie, *E.*, indoles. VII. Stereochemistry of trivalent nitrogen, II, 191.
- and Willison, *A. M.*, synthesis of octahydropyrrocolines, II, 331.
- See also Flack, *A.*, and Gillis, *R.*
- Liotta, *S.*, all-glass ball-valve stirrer, I, 273.
- Lipkin, *D.*, and Stewart, *T. D.*, preparation and asymmetric reduction of β -methylcinnamic acid, II, 85. Asymmetric reduction of β -methylcinnamic acid by *d*-glucose in presence of Raney nickel, II, 85.
- Lipmann, *F.*, phosphorylated oxidation product of pyruvic acid, II, 266. Non-activation of pyruvic acid oxidation by free vitamin-B₁, III, 161.
- Behrens, *O. K.*, Kabat, *E. A.*, and Burk, *D.*, determination of total *d*-amino-acid content of human tumour and normal tissues by means of *d*-amino-acid oxidase, III, 424.
- See also Behrens, *O. K.*
- Lipp, *P.*, and Bräucker, *H.*, tricyclal, II, 136.
- Lipp, *W. F.*, and Hubbard, *R. S.*, human blood stored at 4°, III, 558.
- Lippard, *V. W.*, immunological response to ingestion of foods by normal and by eczematous infants, III, 157.
- Lippi-Boncambi, *C.*, some red-coloured earths in the neighbourhood of Anghiari (Province of Arezzo), I, 86.
- Lippross, *O.*, temporary disturbances of cardiac conductivity, III, 190.
- Lipschütz, *A.*, experimental uterine fibromyoma, III, 660.
- and Vargas, *L.*, tumorigenic action of stilbestrol, III, 582.
- Vargas, *L.*, Jedlicky, *A.*, and Bellolio, *P.*, minimum quantity of oestrogen required to induce atypical epithelial growth of uterine mucosa in the guinea-pig, III, 815.

- Lipschütz, A., Vargas, L., and Ruz, O., antitumorogenic action of testosterone, III, 216.
See also Jedlicky, A.
- Lipsehutz, E. W., modification of hippuric acid liver function test, III, 220.
- Lipscomb, F. M., synthetic drugs in treatment of malaria, III, 332.
- Lipscombe, A. G., reaction between $\beta\beta'$ -dichlorodiethyl sulphide (mustard gas) and bleaching powder, II, 117.
- Lipson, H., and Taylor, A., defect lattices in ternary alloys, I, 67.
and Wilson, A. J. C., properties of alloy equilibrium diagrams derived from the principle of lowest free energy, I, 437.
- Lipson, M., dosing of sheep with phenothiazine, III, 440.
See also Gordon, H. McL.
- Lipton, M. A., and Elvehjem, C. A., mechanism of the enzymic phosphorylation of thiamin, III, 348.
See also Sober, H. A.
- Lisa, J. R. See Hart, J. F.
- Lisansky, E. T., and Pembroke, R. H., jun., treatment of pneumococcal meningitis (type XV) with sulphanilamide, III, 330.
- Lisle, E. B., semi-micro-analytical determination of methoxyl groups in organic compounds, II, 60.
- Lison, L., histophysiological studies of amphibian kidney, III, 555. Intestinal excretion and atrophyctosis in *Machilis maritima*, Leach, III, 585. Hepatic excretion in crustacea, III, 586.
See also Cordier, R.
- Lissak, K., liberation of acetylcholine and adrenaline by stimulating isolated nerves, III, 199.
See also Rosenbluth, A.
- Lisser, H., feminisation and demasculinisation of 17-year-old girl by injections of stilboestrol, III, 902.
See also Escamilla, R. F.
- Litchfield, H. R., Lichterman, J., Knoll, I., and Kurland, I., effect of yeast extract (vitamin-B complex) on growth and development of premature infants, III, 144.
- Litchfield, J. T., jun., effects of sulphanilamide on the lower vertebrates, III, 60.
- White, H. J., and Marshall, E. K., jun., experimental basis for a method for quantitative evaluation of effectiveness of chemotherapeutic agents against streptococcus infection in mice, III, 152. Comparative therapeutic activity of sulphanilamide, sulphapyridine, sulphathiazole, and diamino[diphenyl]-sulphone in type I pneumococcus infections in mice, III, 676. Comparative therapeutic activity of sulphanilamide, sulphapyridine, and diamino[diphenyl]sulphone in streptococcus infections in mice, III, 676.
See also Marshall, E. K., jun.
- Littenhous, E. E., Van Arsdale, J. D., and Hutchison, I. W., physical properties of the ternary system butyl alcohol-ethyl acetate-toluene, I, 204.
- Little, A. J., McLean, J., and Wilson, F. J., preparation of optically active semicarbazides, and a resolution of benzoin, II, 177.
- Little, C. C., hybridisation and tumour formation in mice, III, 141.
and Pearsons, J., results of a "functional test" in a strain of mice (C57 Black) with low breast tumour incidence, III, 506.
See also Murray, W. S.
- Little, G. M., scarlet fever immunisation in Edmonton, Alberta, III, 265.
- Little, J. M., hydrolysis of acetylcholine by turtle blood, III, 96.
and Wells, H. S., student apparatus for analysis of respiratory gases, III, 195.
- Little, R. B., effect of advanced lactation in cow on physical and chemical composition of milk, III, 314.
- Littler, T. S., effect of noises of warfare on the ear, III, 804.
See also Dickson, F. D. D.
- Littner, N. See Ham, A. W.
- Litvak, I. B. See Gelman, A.
- Litvinov, N. D., pressure of saturated vapour of two volatile liquids miscible in all proportions, I, 18.
- Liu, C. See Chi, Y. F.
- Liu, G. C. See under Lu, G. C.
- Liu, P. Y. See Zia, S. H.
- Liu, S. C., and Wu, H., precipitation reaction of crystalline globulin of water-melon seed, III, 690. Recovery of antigen from type I pneumococcus immune precipitate, III, 771.
- Liu, S. H., rôle of vitamin-D in calcium metabolism in osteomalacia, III, 674.
- Chu, H. I., Su, C. C., Yu, T. F., and Cheng, T. Y., metabolic behaviour of infants fed on breast milk from mothers showing various states of vitamin-D nutrition, III, 515.
and Noble, R. L., effects of extracts of pregnant mare serum and human pregnancy urine on reproductive system of hypophysectomised male rats, III, 32.
See also Chen, K. C., Chu, H. I., and Snapper, I.
- Liubomilov, V. I., Rutovski, B. N., and Scheremeteva, T. V., bornyl chloride and its isomerides. I, II, 228.
- Lium, R., aetiology of ulcerative colitis. IV. Rectometrogram and rectal reactions of 8 normal subjects and one patient with ulcerative colitis before and after spinal anaesthesia, III, 220.
and Florey, H. W., action of magnesium sulphate on intestine of the cat, III, 134.
- Livingood, J. J., and Seaborg, G. T., induced radioactivities, I, 339.
See also Cohn, E. J., and Seaborg, G. T.
- Livingston, A. E. See Fellows, E. J.
- Livingston, M. S. See Hoffman, J. G.
- Livingston, R., photochemical oxidation of oxalic acid sensitised by ferric ions, I, 327.
- Livingstone, H. M. See Andrews, W.
- Livingstone, W. K., surgery of autonomic nervous system, III, 24.
- Ljaschenko, V. I., polarisation in cuprous oxide at low temperatures. II, I, 324.
- Llewellyn, F. J., water in hydrated compounds, I, 432.
- Lloyd, A. J., and Gonge, C. M., correlation between egg-carrying setae and cement glands in decapod crustacea, III, 808.
- Lloyd, E. H. See Kynch, G. J.
- Lloyd, H., and Guénault, E. M., recording microphotometer, I, 301.
- Lloyd, L. See Golightly, W. H.
- Lloyd, P., use of oxygen on Mt. Everest expedition, 1938, III, 18.
- Lloyd, S. J. See Palmer, G. D.
- Lloyd, T. W. See Baar, H. S.
- Lobatschevskaia, O. V., inorganic constituents of heart muscle of vertebrates, III, 564.
- Loben, F., action of dorital in arterial hypertension, III, 439.
- Locke, A., and Cohen, M. A., effect of inhaled carbon dioxide in rheumatoid (atrophic) arthritis, III, 712.
and Mellon, R. R., action of sulphanilamide, III, 59.
- Locke, A. P. See Mellon, R. R.
- Locke, S. B., Riker, A. J., and Duggar, B. M., production of growth-substance on peptone broth by crown-gall bacteria and related non-gall-forming organisms. III, 539. Nature of growth-substance originating in crown-gall tissue, III, 539.
- Lockemann, G., and Heicken, K., germicidal action of six isomeric xylenols and their mono-chloro- and -bromo-derivatives, III, 774.
- Lockhart, C. H. See Herrick, E. H.
- Lockhart, J. C. See Althausen, T. L.
- Lockie, L. M., use of a therapeutic and a provocative test in gouty arthritis, III, 432.
- Lockwood, H. C., adjustable support for crucibles and dishes, I, 236.
- Lockwood, J. E. See Griffith, F. R., jun.
- Lockwood, J. S., and Lynch, H. M., mechanism of action of sulphanilamide, III, 597.
and Robinson, H. J., comparison of sulphanilamide and benzylsulphanilamide and significance of variations in experimental technique, III, 330.
See also Pepper, D. S.
- Lockwood, W. H. See Mellor, D. P.
- Lodenkämper, H., coli toxins. II and III, III, 769.
- Lodge, R. M., and Hinshelwood, C. N., physicochemical aspects of bacterial growth. IV. Conditions determining stationary populations and growth rates of *Bact. lactis aërogenes* in synthetic media. V. Effect of magnesium on lag phase in growth of *Bact. lactis aërogenes* in synthetic media containing phosphate, III, 75.
- Loeb, L., and Hayward, S. J., effects of formalin on gonadotropic and thyroid-stimulating hormones of cattle anterior pituitary glands in guinea-pig, III, 301. Effects of formalin on hormones of human pregnancy urine, III, 579.
See also Suntzeff, V., and Wolfe, J. M.
- Loeb, L. B. See Varney, R. N.
- Loeb, R. F. See Ferrebee, J. W., and Kuhlmann, D.
- Loebenstein, A., exchange of hydrogen for deuterium in sparingly soluble substances, II, 194.
See also Bernoulli, A. L.
- Loebenstein, W. V. See Fowler, D. L.
- Löbering, J., kinetic investigations of highly polymerised compounds (polyoxymethylene and cellulose), I, 122.
- Loefer, J. B. See Hall, R. P.
- Loeffel, E. See MacBryde, C. M.
- Loeffler, M. K. See Fardon, J. C.
- Loeffler, O. H. See Gibson, R. E.
- Löffler, W., and Koller, F., experiences with purified liver extracts [in anaemia] III, 879.
and Maier, C., clinical experiments with sulphapyridine, III, 598.
- Loehner, C. A., use of adrenal cortical extract in psychotic and non-psychotic patients, III, 897.
- Löhr, H., and Tillmanns, H., electrocardiograms in old age, III, 190.

- Loehwing, W. F., photoperiodic aspects of phasic development [in plants], III, 364.
- Loeschke, E. See Schwartz, K.
- Loeser, A., subcutaneous implantation of sex hormones, III, 581.
See also Grumbrecht, P.
- Loevenich, K. See Dyckerhoff, H.
- Loew, E. R., Gray, J. S., and Ivy, A. C., effect of duodenal instillation of hydrochloric acid on fasting blood-sugar of dogs, III, 38. Effect of acid stimulation of duodenum on experimental hyperglycæmia and utilisation of glucose, III, 416.
- Loewe, L., and Lenke, S. E., cardiac lesions resembling Aschoff bodies in rabbits, III, 191.
See also Arndt, F.
- Loewe, S., synergism of *Cannabis* and bromoallylbutylbarbituric acid, III, 602.
See also Adams, R.
- Löwenbach, H., and Gantt, W. H., conditioned vestibular reactions, III, 492.
- Loewenberg, R. D. See Meyerbach, F.
- Loewenberg, S. A., and Sloane, N. G., diabetes insipidus of over twenty years' standing improved following a subarachnoid hæmorrhage, III, 848.
- Loewenstein, E. See Kuck, J. A.
- Löwenstein, O., and Sand, A., mechanism of semicircular canal; responses of single-fibre preparations to angular accelerations and to rotation at constant speed, III, 805.
- Loewenthal, H., and Hopwood, F. L., serological properties of extracts of hæmolytic streptococci prepared by ultrasonic vibrations, III, 771.
- Loewi, O. See Duilière, W.
- Loftis, E. L., purpura due to injection of oestrogenic substance, III, 810.
- Logan, A. V. See Davis, T. L.
- Logaras, G. See Thomson, A. M.
- Logel, R. See Dirr, K.
- Lohmann, K., and Cheng, C. T., influence of magnesium and manganese salts on growth of *Phycomyces*, III, 767.
and Kossel, A. J., action of zinc and other metals on carboxylase, III, 346.
- Lohmann, R., action of insulin on use of glucose during breakdown of glycogen, III, 305.
- Loiseleur, J., formation of the silver mirror, I, 170. Detection of surface layers by secondary variations of reflecting power, I, 235.
and Schmitz, R. H., preparation of colloidal particles possessing a required diameter, I, 160.
- Loken, R. See Ziskind, E.
- Loman, J., Rinkel, M., and Myerson, A., comparative effects of benzedrine sulphate, parendrine, and propadrine on blood pressure, III, 101.
See also Myerson, A.
- Lommel, G. W. van, effect of testosterone on sensitivity of uterus to pituitrin, III, 130.
- Long, C. N. H., Katzin, B., and Fry, E. G., adrenal cortex and carbohydrate metabolism, III, 433.
See also Harrison, H. C.
- Long, E. A., and Toettcher, F. C., transitions in nickel nitrate hexammoniate, I, 353.
- Long, F. A. See Nutting, G. C.
- Long, H., and Pyrah, L. N., rôle of vitamin-A deficiency in ætiology of renal calculus, III, 592.
- Long, M. L., and Bischoff, F., influence of heptaldehyde on Marsh-Buffalo adenocarcinoma, III, 508.
See also Bischoff, F.
- Long, P. H., thiazole derivatives of sulphanimide, III, 599. Chemotherapy of pneumonia, III, 861.
and Bliss, E. A., experimental use of sulphapyridine. I. Relation of strain-resistance to chemotherapeutic effects of sulphapyridine in experimental pneumococcal infections in mice, III, 330. Bacteriostatic effects of sulphathiazole on various micro-organisms; its therapeutic effects in experimental pneumococcal infections, III, 676.
- Haviland, J. W., and Edwards, L. B., acute toxicity, absorption, and excretion of sulphathiazole and certain derivatives, III, 677.
- and Wood, W. B., jun., treatment of pneumococcal pneumonia with sulphapyridine, III, 330.
See also Wood, W. B., jun.
- Long, R. S. See Adams, R.
- Longchambon, L., and Zajtmann, J., physico-chemical properties of kaolinic clays, I, 182.
- Longenecker, H. E., Fricke, H. H., and King, C. G., effect of organic compounds on vitamin-C synthesis in rats, III, 915.
- Gavin, G., and McHenry, E. W., fatty acids synthesised by the action of thiamin, III, 750.
- Longhuan, O. See Evans, W.
- Longinescu, G. G., and Iordache, N., separation of calcium from barium and strontium [nitrates] by the alcohol method, I, 232.
- and Prundeanu, E. I., indirect determination of hydrochloric and hydrobromic acids by conversion of the silver chloride into silver bromide, I, 230.
- Longley, B. J. See Bunting, C. H.
- Longo, B., passage from the diphenyl to the fluorene system: preparation of 2:6-, 2:7-, and 3:5-dimethylfluorene, II, 161. Determination of halogens, particularly of iodine, in organic compounds by means of the bomb calorimeter, II, 200.
- Longworth, L. G., observations of electrophoretic boundaries, I, 72.
and MacInnes, D. A., interpretation of simple electrophoretic patterns, I, 256. Electrophoretic study of nephrotic sera and urine, III, 222.
- Shedlovsky, T., and MacInnes, D. A., electrophoretic patterns of normal and pathological human serum and plasma, III, 381.
- Longtin, B. See Randall, M.
- Longwell, B. B., and Wintersteiner, O., preparation and properties of 3(a):11-dihydroxy-12-ketocholanic acid, II, 95. Oestrogens with oxygen in ring B. III, 6-Keto- α -oestradiol, II, 180.
- Lonie, T. C., ascertainment of deafness and ear disease in children, III, 301.
- Lonsdale, K., magnetism and the structure of matter, I, 152. Magnetic anisotropy of diphenyldiacetylene, I, 153.
- Knaggs, I. E., and Smith, H., diffuse reflexion of X-rays by single crystals, I, 432.
and Smith, H., crystal structure of cyclohexane at -180° , I, 62.
See also Knaggs, I. E.
- Loney, J. M., Maya Old Empire skeleton from Copan, Honduras, III, 784.
- Loe, W. S. See Tang, P. S.
- Loofbourov, J. R., Cueto, A. A., Whalen, D., and Lane, M. M., local growths in animals produced by injection of intercellular wound hormones, III, 316.
and Dwyer, C. M., effect of the suspending medium on the production of growth factors by injured cells, III, 350. Intercellular wound hormones produced by toxic effect of heteroauxin, III, 547.
- Dwyer, C. M., and Lane, M. M., proliferation-promoting intercellular hormones. I. Factors produced by injured animal tissue cells, III, 426.
and Stimson, (Miss) M. M., ultra-violet absorption spectra of nitrogenous heterocyclic compounds. I. Effect of pH and irradiation on spectrum of adenine. II. Effect of pH and irradiation on spectrum of barbituric acid, I, 344, 402.
- Loomis, A. G. See Ford, T. F.
- Loomis, A. L. See Davis, H.
- Looney, J. M., changes in lactic acid, pH , and gases produced in the blood of normal and schizophrenic subjects by exercise, III, 256. Treatment of pituitary dwarfism with growth hormone, III, 404. Sex factors of adrenal gland, III, 895.
- Freeman, W., and Small, R. R., phyto-toxic index. III. Evaluation of method with reference to depressed psychotic patients, III, 201.
and Walsh, A. I., determination of globulin and albumin in serum by photo-electric colorimeter, III, 12.
- Loos, H. O., chemotherapy of gonorrhœa, III, 437.
- Loose, F. See Siebert, W. J.
- Loosli, C. G. See Gregg, L. A.
- Lopaschov, G. V., character of cell changes in neural plate induction, III, 278.
- López, V. M., primary mineralisation at Chuquicamata, Chile, I, 136.
- López de Azcona, J. M., maximum geological age and consequences of hypothesis of Wilkins. II. β -Activity of ^{176}Lu and its spectrochemical sensitivity, I, 306. Arc spectrum of ytterbium between 2200 and 5000 Å. for 2×10^{-4} , 2×10^{-5} , 2×10^{-6} , 2×10^{-7} , and 2×10^{-8} g., I, 399.
- Lorber, H., and Vesell, M., oestrogenic determinations in case of disgerminoma ovarii complicated by pregnancy, III, 735.
- Lorber, J. See Bacon, J. S. D., and Bell, D. J.
- Lorber, V., lung oedema following bilateral vagotomy, III, 194. Lymph flow from heart-lung preparation during pulmonary oedema, III, 477.
- Lord, E. See Brines, J. K.
- Lord, J. W., jun., and Pastore, J. B., plasma-prothrombin content of bank blood, III, 284.
See also Andrus, W. DeW.
- Lorente de Nó, R., the synapse; transmission of impulses through cranial motor nuclei, III, 21.
- Lorentz, W. See Fabian, G.
- Lorenz, E., treatment of infantile anæmias caused by iron deficiency with ferrous iron, III, 879.
and Andervont, H. B., incidence of induced pulmonary tumours in susceptible mice raised in dust-free air, III, 589.

- Lorenz, F. W. See Entenman, C.
- Lorge, H. J., aetiology of idiopathic pneumothorax, III, 567.
- Loria, K. See Tomme, M.
- Loring, A. D., construction of manometers for measuring flow, I, 83.
- Loring, H. S., solubility of purified tobacco mosaic virus, III, 828.
- Loring, R. A. See Green, J. B.
- Loring, T. W. See Irving, G. W., *jun.*
- Lortie, L., and Demers, P., physicochemical studies on the alkali carbonates. I. Hydrogen-ion activity in aqueous solutions of alkali carbonates, I, 359.
- Losana, L., beryllium alloys. III. System beryllium-aluminium, I, 355.
- Loschkaev, M. See Essin, O.
- Losco, G., reactions of pyrazolone derivatives, II, 55. 1-Phenyl-3-methyl-5-pyrazolone-4-aldehyde, II, 289.
See also Passerini, M.
- Loshetschkin, M. P., chemical composition of "gold cupride," I, 182.
- Lossen, W., hæmorrhage from intercostal arteries into pleural cavity, III, 887.
- Lossie, H. See Schmitt, F.
- Łoszyer, C. See Niemierko, W.
- Lothrop, W. C., Mills-Nixon effect, II, 79.
- Lott, W. A., and Bergeim, F. H., 2-sulph-anilamidothiazole: a new chemotherapeutic agent, II, 110.
See also Bergeim, F. H.
- Lottermoser, A., and Schmöle, G., dependence of [result of] freezing ferric oxide hydrosols on their composition and on the method of freezing, I, 111.
- Lotwin, G. See Kenyon, A. T.
- Lotze, H., intravital hæmolytic, III, 184.
- Loubatières, A., nitrogenous excretion of dog rendered diabetic by Young's method and elimination of ketonic substances, III, 327.
See also Hédon, L.
- Loucks, R. B. See Katzenelbogen, S.
- Loudette, P. See Destriau, G.
- Loughheed, D. W., and Hall, G. E., vascular and respiratory responses during metrazol convulsions, III, 487.
- Loughnane, J. B., *Myzus ornatus* a vector of potato viruses, III, 78.
- Loughridge, D. H., and Gast, P., air mass effect on cosmic-ray intensity, I, 54. Magnetic storm effect on cosmic rays at high latitudes, I, 308.
- Louis, H. L. See Lenchs, H.
- Lourau, M., variations in isoelectric point of antibodies, III, 269.
- De Sacy, G. S., and Arthus, A., *Bartonella muris* anæmia, III, 6.
- Loury, M., synthesis of choline esters, II, 37.
- Louvier, R. See Serfaty, A.
- Love, J. D. See Sheard, C.
- Love, W. R. See Brunsting, L. A.
- Lovelace, W. R. See Boothby, W. M.
- Lovelace, W. R., *jun.* See Boothby, W. M.
- Lovell, A. C. B., and Wilson, J. G., investigations of cosmic-ray showers of atmospheric origin, using two cloud chambers, I, 54.
- Lovell, E. L., and Hibbert, H., freezing points of pure high polymers, I, 105. Reactions relating to carbohydrates and polysaccharides. LXII. Relation between concentration and viscosity of polyoxyethylene glycols. LXIII. Surface tensions of aqueous solutions of polyoxyethylene glycols, I, 411.
- Lovell, H. W., Czarski, T. J., and Lyman, R. S., effect of vestibular stimulation on brain waves, III, 394.
- Lovell, M. E., and Rabinowitch, I. M., factors influencing storage of protein with low-calorie diets, III, 318.
- Loveiman, A. B., symposium on allergic dermatoses; allergic drug eruptions, III, 339.
- Lovera, G., and Pochettino, A., electrification by bubbling and dipole moment, I, 58.
- Lovering, T. S., vein solutions and rock alteration in the Boulder Co. tungsten district of Colorado, I, 398.
See also Goddard, E. N.
- Lovern, J. A., lipins of earthworm, III, 588. Fat metabolism in fish. XIV. Utilisation of ethyl esters of fatty acids by the eel and effect on depot fat, III, 596.
and Morton, R. A., distribution of fatty acids in halibut intestinal oil; free fatty acids in the intestines of fish, III, 38.
- Lovett-Janison, P. L., and Nelson, J. M., ascorbic acid oxidase from summer crook-neck squash (*C. pepo condensata*), III, 764.
- Low, A. A. See Kaplan, M.
- Low, M. See Gutman, A. B.
- Lowan, A. N., problems in the diffraction of heat, I, 105.
- Lowater, F. See Murray, M. M.
- Lowe, A. J. See Miller, (Miss) C. C.
- Lowe, C. S. See White, C. E.
- Lowe, J. T., and Krieger, C. H., cereals and rickets. IX. Availability of phytin-phosphorus to the chick, III, 54.
- Lowell, F. C., String, W. C., *jun.*, and Finland, M., bactericidal action of sodium sulphapyridine and of glucose-sulphapyridine solution in human blood, III, 246.
See also Finland, M., Spring, W. C., *jun.*, and Taylor, F. H. L.
- Lowenberg, C. See Rosebury, T.
- Lowenstein, B. E. See Zwemer, R. L.
- Lowrie, W. L., *jun.*, and Foster, D. P., hypoglycæmic reactions from protamine-zinc-insulin, III, 578.
- Lowry, O. H. See Talbot, N. B.
- Lowstuter, W. R., and Lowy, A., electrochemical oxidation of *n*-hexanol, II, 202.
- Lowy, A. See Lowstuter, W. R.
- Lozinski, E., and Gottlieb, R., substitute for bile salts for administration with substances possessing vitamin-K activity, III, 595.
- Lozner, E. L., Jolliffe, L. S., and Taylor, F. H. L., hæmorrhagic diathesis with prolonged coagulation time associated with a circulating anticoagulant, III, 470.
and Taylor, F. H. L., coagulation defect in hæmophilia; clot-promoting activity associated with plasma-euglobulin in hæmophilia, III, 94.
See also Kark, R.
- Lozovoi, A. V., and Djakova, M. K., velocity of hydrogenation of aromatic hydrocarbons. III. [Dependence of] velocity of reaction on structure. IV., I, 33, 297.
- Lu, C. S., non-metrical morphological characters of western Chinese skulls, III, 554.
- Lu, G. C. See Chi, Y. F.
- Lu, T. W. See Wang, G. H.
- Lubbock, D. M. See Thomson, A. M.
- Lubin, S., and Wattman, R., results of attempted induction at labour with œstrin, III, 652.
- Lubinska, L., and Konorski, J., excitability of motor cortex of dog during different physiological states, III, 393.
- Lubinsky, G., compact dehydrator; a new device for dehydrating and embedding tissues, III, 89.
- Lublin, A. See Stevens, R. J.
- Lubs, M. E. See Buehler, C. A.
- Lucas, A. M. See Gowen, J. W.
- Lucas, C. C. See Townsend, G. F.
- Lucas, G. H. W., and Summerfeldt, P., absorption and utilisation of iron salts, III, 181.
- Lucas, H. J., Hepner, F. R., and Winstein, S., co-ordination complexes of the mercuric ion with cyclohexene, II, 30.
and Stewart, W. T., esters of alginic acid, II, 267. Oxidation of alginic acid by periodic acid, II, 298.
See also Redemann, C. R., and Winstein, S.
- Lucchi, E. See Betti, M.
- Luce-Clausen, E. M., and Brown, E. F., use of isolated radiation in experiments with rats. II. Effect of darkness, visible, and infra-red radiation on three succeeding generations of rats; growth and storage of vitamin-A; reproduction, III, 446.
- Lucentini, R., constancy of blood-cholesterol in children, III, 472.
- Lucia, S. P. See Aggeler, P. M., and Cannon, E. F.
- Luck, J. M., Eudin, J., and Nimmo, C. C., autolytic changes in protein and amino-acid content of liver, III, 40.
See also Ballou, G. A.
- Lueké, B., characteristics of frog carcinoma in tissue culture, III, 423.
- Hartline, H. K., and Ricea, R. A., comparative permeability to water and solutes of egg cells of *Arbacia*, *Cumingia*, and *Chelopterus*, III, 279.
and Schlumberger, H., manner of growth of frog carcinoma, studied by direct microscopic examination of living intra-ocular transplants, III, 423.
- Lucker, J. T. See Stein, C. D.
- Luckiesh, M., and Moss, F. K., subjective refraction involving identical techniques in static and in dynamic tests, III, 639.
and Taylor, A. H., ultra-violet meter for germicidal lamps, III, 447.
- Lucks, C. F. See Russell, H. W.
- Lucksch, F., case of pellagra in schizophrenia, III, 234.
See also Gangl, P.
- Luco, J. V. See Lanari, A., and Rosenblueth, A.
- Ludbrook, W. V., boron deficiency symptoms on pine seedlings in water culture, III, 943.
- Ludden, J. B., and Wright, I., renal retention and vitamin-C saturation tests, III, 430.
- Ludeman, C. G., critical solution temperatures and aniline points of butane hydrocarbons, I, 408.
- Luder, W. F., precision conductivity bridge assembly, I, 133.
and Vernon, A. A., flexible conductivity bridge assembly, I, 375.
- Ludewig, S., Minor, G. R., and Hortenstine, J. C., lipin distribution in rat liver after partial hepatectomy, III, 220.
See also Channin, A.
- Ludford, R. J., interaction of cells and tumour growth, III, 507.
- Ludlam, E. B. See Wyllie, D.

- Ludlum, J. C., calcium carbonate deposits marginal to glaciers, I, 380.
- Ludueña, F. P., action of sympatholytic agents (yohimbine, ergotoxine, and piperidinomethyl-3-benzodioxan) on retractor penis, III, 393.
- Ludvig, E., determination and significance of photopic retinal visibility curve, III, 803.
- Ludwig, A., and Georgescu, R. I., action of succinic and phthalic anhydrides, and of *o*-phthalaldehydic acid on Schiff's bases, II, 174.
- and Tache, S., action of benzoic, propionic, and hexoic anhydrides on the azomethine bridge, II, 174.
- Ludwig, B. J., and Nelson, J. M., inactivation of tyrosinase in the oxidation of pyrocatechol, III, 70.
- Ludwig, C. A., Allison, F. E., Hoover, S. R., and Minor, F. W., production and utilisation of alcohol by plant tissues, III, 458.
- Ludwig, W., changes in gaseous metabolism induced by gas masks, III, 295.
- and Dorzbach, E., chemistry and physicochemistry of lumbar anaesthesia, III, 925.
- Lü, Y. M. See Chang, H. C.
- Lüdtke, M., direct observation of structural elements of size 0.2μ in the plant cell wall, III, 461.
- Lührmann, H. See Hertel, E.
- Lührs, W., influence of hormones on excretion of creatine and creatinine, III, 121.
- Lueng, C. C. See Chi, Y. F.
- Lüscher, E., effects on hearing produced by experimental pressure on tympanic membrane, III, 117.
- Lüttringhaus, A., and Buchholz, K., valency angle studies. V. Stereochemistry of the sulphone group. VI. Stability of the tetrahedral angle at a carbon atom, II, 139, 305.
- and Hauschild, K., valency angle studies. VII. Relationships between valency angle and isomorphous replacement with bivalent atoms and pseudo-atoms, II, 305.
- and Sääf, G. von, isomerisation during distillation with zinc dust, II, 78.
- Mode of reaction of organo-metallic compounds. IV. Rearrangement of diaryl ethers to *o*-arylphenols, II, 80.
- Luft, U., adaptation in high altitudes, III, 195.
- Lugli, G., effect of anaesthesia on vasomotor reactions due to peripheral stimulation, III, 16.
- Luisada, A., advances in study of auricular disorders, III, 841.
- Luke, J. C., congenital arteriovenous fistula, III, 477.
- Lukens, F. D. W., and Palmer, H. D., adrenal cortical virilism, III, 728.
- See also Dohan, F. C., Elsom, K. O., and Stadie, W. C.
- Lukens, H. S. See Armstrong, E. V.
- Lukens, M. See Boerner, F., and Flisdorf, E. W.
- Lukes, R. V. See Gilliland, E. R.
- Lukesh, J., mounting powdered samples for X-ray diffraction, I, 377.
- Lukin, A. M., and Aronovitch, P. M., polycyclic compounds. I. Anthrapyridoneacridone, II, 192.
- Luna, E., carotid nerve and plexus, III, 24.
- Lundbæk, K., diagnosis of gastritis, III, 133.
- Oedema of stomach in case of familial Quincke's disease, III, 907.
- Lundberg, B. See Euler, B. von.
- Lundberg, W. O. L. See Burr, G. O.
- Lunde, G., vitamin-B complex, III, 232.
- and Kringstad, H., need of foxes for anti-grey hair factor, vitamin-B₂, III, 234.
- Discrepancies between biological, chemical, and spectrographic determinations of vitamin-A, III, 321.
- Factors of vitamin-B complex, III, 749.
- Anti-grey hair vitamin: new factor in vitamin-B complex, III, 858.
- and Lie, J., availability of calcium in fish and fish bones, III, 319.
- See also Kringstad, H.
- Lundegårdh, H., quantitative emission spectrum analysis of inorganic elements in solution, I, 232.
- Salt absorption of plants, III, 361.
- Lundell, G. E. F. See Hoffman, J. I.
- Lundgren, H. P., and Williams, John Warren, ultracentrifugal analysis and stability in protein systems, I, 24.
- See also Pappenheimer, A. M., jun.
- Lundin, B. N., "aa'-dinaphthyl," a by-product in preparation of perylene, II, 43.
- See also Postovski, I. J.
- Lundsgaard, E., acid-soluble phosphate compounds in intestinal mucosa, at rest and during hexose resorption, III, 415.
- See also Liljestrand, Å.
- Lundstedt, O. W. See Baxter, G. P.
- Lundsteen, E. See Alsted, G.
- Lung, K. H. See Weidenhagen, R.
- Lunn, V., and Fog, M., reaction of pial arteries to choline-like and adrenaline-like substances, III, 709.
- Lunt, R. W., and Gregg, A. H., occurrence of negative ions in glow discharge through oxygen and other gases, I, 425.
- Pearson, T. G., and Topley, B., chemical reaction in electric discharges. IV. Negative glow reaction in hydrogen-oxygen mixtures, I, 443.
- and Swindell, G. E., chemical reaction in electric discharges. III. The meaning of Φ , the electrochemical analogue of photochemical quantum yield, and factors controlling Φ in the stationary state, I, 443.
- Lupascu, I. See Nasta, M.
- Luria, S., effect of radiations on *B. coli*, III, 69.
- Statistical study of action of viruses, III, 690.
- See also Holweck, F., and Wollman, E.
- Lurie, M. B., and Zappasodi, P., relative spread of particulate and diffusible substances in skin of male and female rabbits, III, 420.
- Lurie, M. H., what is perception deafness from a physiological and histological basis? III, 205.
- Lurie, S. I., and Fedorova, Z. I., esters of choline and its homologues. I, II, 156.
- Kuleschova, M. G., and Kotschetkov, N. K., *N*-derivatives of imidazole (glyoxaline). I, II, 192.
- Lush, D. See Burnet, F. M.
- Lušický, K., action of cysteine in acute disease of liver, III, 586.
- Lusignani, G., preparation of α -di-iodoisopropyl alcohol, II, 34.
- Lustig, B., and Wachtel, H., effect of organ extracts, particularly the pituitary, on growth, III, 587.
- Effect of extracts of benign and malignant tumours on germination and growth of plants, III, 590.
- Lustig, B., and Wachtel, H., effects of extracts of animal organs on germination of plants and effect of animal organs on growth of germinated plants, III, 617.
- Lusozak, A., determination of carboxyhaemoglobin with König-Martens spectrophotometer, III, 795.
- Lute, A. M. See Robertson, D. W.
- Lutembacher, R., partial systoles and uniformly slowed conduction [action of digitalis], III, 14.
- Luther, W., effect of X-rays on the skin of amphibians before and after metamorphosis, III, 160.
- Action of tissue extracts of tumour-bearing animals on growth of yeast cultures, III, 317.
- Effects of X-rays on cell division, III, 626.
- Lutherman, C. Z. See Allee, W. C., and Park, T.
- Lutschinski, G. P., conditions of phase equilibrium in systems containing halides and free halogens. III. Tensimetric study of the system H₂O-Br-KBr, I, 27.
- and Tavrovskaja, R. M., accumulation of sulphur dioxide in sodium phosphate solutions, I, 389.
- Lutwak-Mann, C., adenine derivatives and their biological functions, III, 226.
- Enzyme systems in articular cartilage, III, 504.
- Lutz, H., orientation of uncubated fowl blastoderm, III, 623.
- See also Wolff, Etienne.
- Lutz, J. F. See Harne, O. G.
- Lutz, L., aldehydes in essential oils and their anti-oxygen properties, III, 615.
- Aseptic autolysis of two insoluble gums, III, 617.
- Lutz, R. E., and Kibler, C. J., α , δ -diphenyl- β -mesityl- α , δ -diketones, II, 19.
- β -Phenyl- α , δ -dimesityl- α , δ -diketones, II, 20.
- α , β , δ -Trimesityl α , δ -diketones and related compounds, including the stereoisomeric mono- and di-enols, II, 178.
- Substituted 2:5-dimesitylfurans, II, 312.
- Lutzmann, H. See Helferich, B.
- LuValle, J. E., and Schomaker, V., molecular structure of glyoxal and dimethylglyoxal by the electron diffraction method, I, 101.
- Lux, H., reactions in melts, I, 363.
- Luxen, M. P. See Marshall, M. S.
- Luxton, R. W. See Don, C. S. D.
- Luyet, B. J., vitrification of water, I, 100.
- Existence of a vitreous state in gelatin gels, I, 358.
- Case against cell theory, III, 701.
- Lvov, A. See Emerique-Blum, L.
- Lyall, A., pathology of chloride metabolism in man, III, 241.
- See also Anderson, I. A.
- Lyddane, R. H., and Stuhlman, O., jun., theoretical response of living cells to contact with solid bodies, III, 684.
- Lydén, R., reaction of U₃O₈ with alkali hydrogen carbonate solutions, I, 265.
- Reaction of uranium dioxide with compounds of the noble metals, I, 265.
- Lyman, C. M., and Barron, E. S. G., biological oxidations. XII. Oxidations and carbohydrate synthesis in nephritic kidney slices, III, 239.
- Lyman, R. S. See Lovell, H. W.
- Lynch, D. O., report of 116 controlled cases of epilepsy, III, 201.
- Lynch, G. R. See Harley, D.
- Lynch, H. See Johnson, S. H.
- Lynch, H. M. See Lockwood, J. S.

- Lyne, R. R., Peat, S., and Stacey, M., polysaccharides. XXXIX. Constitution of levans formed by bacterial action, II, 120.
- Lynen, F., and Neciullah, N., degradation of succinic, malic, and citric acid by yeast, III, 165.
- Lyon, E., relationship between vitamin-A metabolism and thyrogenic osteoporosis and arthrosis, III, 894.
- Lyon, R. A., and Rauh, L. W., extra-systoles in children, III, 14.
- Rauh, L. W., and Stirling, J. W., heart murmurs in newborn infants, III, 564. See also Anderson, N. A.
- Lyons, R. H., erythropoiesis following bleeding peptic ulcer, III, 181. See also Adcock, J. D.
- Lyons, W. R., and Sako, Y., direct action of oestrone on mammary gland, III, 849. See also Li, C. H.
- Lyth, J. C., hypertonic sodium sulphate for infected wounds, III, 522.
- Lyth, R. See Twort, J. M.
- Lythgoe, B. See Carter, P. W., and El Sadr, M. M.
- Lythgoe, R. J., dark adaptation, III, 116. See also Broda, E. E.
- Lytile, J. D. See Goettsch, E.
- Lytleton, R. A., and Hoyle, F., evolution of the stars, I, 343.
- M.
- Ma, C. Y., and Band, W., law of Magnus in single-crystal aluminium wires, I, 433.
- Ma, S. T., photomagnetic disintegration and magnetic moment of the deuteron in the meson theory, I, 342.
- Ma, T. S., synthetic drugs. I. Partial reduction of some alkyl quaternary salts of pyridine- and quinoline-carboxylamides. II. Attempted synthesis of 4-methyl-5:5-dialkyluracils, II, 288, 290.
- Ma, W. C., blood changes during intoxication and detoxication in chronically morphinised rat. V. Changes in spleen, III, 382. See also Hsü, C. L.
- Maas, O. See Cummings, J. N.
- Maaske, C. A., and Gibson, B., effects of magnesium on denervated mammalian muscle, III, 197. See also Boyd, T. E.
- Maass, O. See Adams, A. B., Dacey, J., Giguère, P. A., Mason, S. G., Naldrett, S. N., and Ross, A. S.
- Mabuchi, O. See Sasaki, N.
- McAlister, E. D., and Myers, J., time course of photosynthesis and fluorescence observed simultaneously, III, 871.
- Macara, T. J. R., and Plimmer, R. H. A., analysis of proteins. XII. Dephosphocaseose or depocaseose, II, 385.
- McArdle, B., serum-choline-esterase in jaundice and liver disease, III, 417.
- Macarovič, C. G. See Spacu, G.
- MacArthur, I., enzyme kinetics, III, 866.
- MacArthur, M., histology of some physiological disorders of apple fruit, III, 366.
- Macartney, D. W. See Don, C. S. D.
- Macary, S. See Mercier, F.
- McBain, J. W., colloidal electrolytes, I, 293. and Ford, T. F., sodium palmitate curd as studied in the centrifuge, I, 254.
- McBain, J. W., Ford, T. F., and Mills, G. F., microtome measurements of the adsorption of hydrocinnamic acid in the surface of its aqueous solutions, I, 356. Interferometer method for measuring absolute adsorption in surface of solutions, I, 389.
- and Lewis, A. H., directly air-driven transparent ultracentrifuges, I, 134. Simplest ultracentrifuge with photographic recording, I, 177.
- and Spencer, W. V., solutions of hydrocinnamic acid and of dodecanesulphonic acid studied with the film balance, I, 209.
- Vinograd, J. R., and Wilson, D. A., observations of surface tension in the PLAWM trough, I, 209.
- and Wood, L. A., adsorption of dodecanesulphonic acid in the surface of its aqueous solution, and the Gibbs theorem, I, 209.
- McBain, M. E. L., Dye, W. B., and Johnston, S. A., solutions of the paraffin-chain sulphonic acids as colloidal electrolytes, I, 24.
- and Perry, L. H., type III surface tension curves with minimum in dilute solution in pure hydrocarbons, I, 252.
- Macbeth, A. K. See Cooke, R. G., and Gillespie, D. T. C.
- McBryde, A. See Harrell, G. T.
- MacBryde, C. M., toxic hepatitis from cinchophen, III, 338.
- Freedman, H., and Loeffel, E., clinical use of stilbæstrol, III, 655.
- Freedman, H., Loeffel, E., and Allen, D., oestrogenic therapy by implantation of stilbæstrol pellets, III, 656.
- Freedman, H., Loeffel, E., and Castrodale, D., stilbæstrol, III, 903.
- McBryde, C. N. See Chapin, R. M.
- McBurney, C. H. See Fuson, R. C.
- McBurney, L. F. See Miller, E., and Sprague, J. M.
- McCahy, J. F. See Soloway, D.
- McCale, C. H. See Wood, R. G.
- McCalla, A. G., and Gralén, N., gluten protein, II, 317.
- Weir, J. R., and Neatby, K. W., effects of temperature and sunlight on rate of elongation of stems of maize and gladiolus, III, 270.
- MacCallan, A. F., sulphonamides in trachoma, III, 521.
- MacCallum, D. B., degenerating glomeruli and vascular supply of mammalian kidney, III, 137.
- MacCallum, E. See Maepherson, A. I. S.
- MacCallum, F. O. See Findlay, G. M.
- MacCallum, K. J., and Leifer, E., thermodynamic properties of the PN molecule, I, 358.
- MacCallum, W. G., viruses in disease, III, 828.
- McCance, R. A., and Widdowson, E. M., fate of strontium after intravenous administration to normal persons, III, 155.
- McCann, W. S., Bright's disease, III, 503.
- MacCardle, R. C. See Engman, M. F.
- McCarrell, J. D., cervical lymph pressure in dog, III, 103. Lymphatic absorption from nasopharynx, III, 103. Effect of warm and cold nasopharyngeal irrigation on cervical lymph flow, III, 473.
- McCarter, J. C., silver carbonate staining for oligo-dendrocytes and microglia, III, 555.
- McCarthy, J. E. See Brown, S.
- McCarthy, J. L. See Godard, H. P., and Peniston, Q. P.
- McCaughan, J. M., experimental pancreatic fistula, III, 37.
- McCay, C. M., Ellis, G. H., Barnes, L. L., Smith, C. A. H., and Sperling, G., chemical and pathological changes in ageing and after retarded growth, III, 47.
- Maynard, L. A., Sperling, G., and Barnes, L. L., retarded growth, life span, ultimate body size, and age changes in the albino rat after feeding diets restricted in calories, III, 47.
- and Smith, S. E., tomato pomace in diet, III, 749.
- MacCharles, M. R., and Kippen, J. W., three cases of actinomycosis treated with sulphanilamide, III, 245.
- McClary, J. E., synthesis of thiamin by excised roots of maize, III, 941.
- McClellan, D., and Hale, C. W., mucolytic effects of natural and artificial spreading factors; mucinase and tissue permeability, III, 707.
- McClellan, P. P., melamine preparation, II, 382.
- McClelland, E. W., Rose, M. J., and Bartlett, R. G., reaction of acylbenzothiazolones with acetic anhydride and potassium acetate, II, 196.
- McClelland, J. E., syndrome of hydro-microcephaly, III, 394.
- McClendon, J. F., and Olson, P., failure to find seasonal variation in basal metabolic rate, III, 725.
- McClintock, J. T., Hines, H. M., and Jordan, D. P., effects of activity on tissues of rat, III, 256.
- McClintock, L. See Howard, F. H.
- McClure, F. J., effect of fluorides on salivary amylase, III, 217.
- McClure, F. T. See Sandin, R. B.
- McClure, R. D., and Lam, C. R., heparin in post-operative pulmonary embolism, III, 790.
- Maccolini, R., vitamin-C and blood complement, III, 52.
- McCollum, E. V. See Mackenzie, C. G., Orent-Keiles, E., and Shils, M.
- McConnell, D., symmetry of phosphosiderite, I, 85. Isomorphic substitutions in apatite, I, 179.
- and Gruner, J. W., problem of the carbonate-apatites. III. Carbonate-apatite from Magnet Cove, Arkansas, I, 304.
- McConney, F. S., case of *Staphylococcus hamolyticus* septicæmia treated with damagan, III, 242.
- McCoord, A. B. See Baum, W. S., Breese, B. B., and Clausen, S. W.
- McCorkle, M. R., reactions of high-mol.-wt. fatty acid derivatives, II, 246.
- Maccormac, M., and Townend, D. T. A., mechanism by which "cool" flames give rise to "normal" flames. III. Physical characteristics of the two-stage process of ignition of ether-oxygen mixtures. IV. Chemical character of the "blue" flame initiated in the "cool" flame products of ether-oxygen mixtures, I, 166.
- MacCorquodale, D. W., Cheney, L. C., Binkley, S. B., Holcomb, W. F., McKee, R. W., Thayer, S. A., and Doisy, E. A., constitution and synthesis of vitamin-K₁, II, 17. See also Huffman, M. N., and McKee, R. W.
- McCouch, G. P. See Hughes, J.
- McCoy, D. O., breakdown potentials of gases under alternating voltages, I, 137.

- McCoy, E. See Krauskopf, E. J.
 McCoy, J. S. See Niederl, J. B.
 McCracken, M. E. See Tsao, Y. F.
 McCravy, A. See Wood, O. T.
 McCrea, A., fungicidal testing: comparison of methods, III, 444.
 McCrea, F. D., and Taylor, H. M., use of pentamethylenetetrazole (metrazol) as a respiratory stimulant in acute alcoholic depression, III, 335.
 McCready, R. M. See Hassid, W. Z.
 McCreary, J. F. See May, C. D.
 McCreary, R. L. See Wood, G. E.
 McCrosky, C. R., Bergstrom, F. W., and Waitkins, G., reactions of nitriles and related compounds with sulphur in presence of amines; synthesis of quaternary ammonium thiocyanates, II, 366.
 See also Shaver, R. C.
 McCullagh, D. R., and Bowman, W. E., extraction and assay of gonadotropic hormones from human male urine, III, 900.
 Schneider, Isadore, and Emery, F., spectrophotometric studies of *m*-dinitrobenzene reaction with sex steroids, III, 735.
 See also Wofford, C. P.
 McCullagh, E. P., peroral use of methyltestosterone in testicular deficiency, III, 902.
 and Lilga, H. V., bioassays for urinary androgens in men with endocrine disturbances, III, 645.
 and McGurl, F. J., effects of testosterone propionate on epiphyseal closure, sodium and chloride balance, and on sperm counts, III, 644.
 and Ryan, E. J., renal insufficiency with tetany in an adult, III, 312. Deoxycorticosterone acetate in Addison's disease, III, 896.
 See also Cook, R. P., and Wofford, C. P.
 McCulloch, E. C., experimental production of hepatic cirrhosis by seed of *Amsinckia intermedia*, III, 418.
 and Murer, H. K., sodium chlorate poisoning, III, 761.
 McCulloch, R. J. P., eye signs in intracranial disease, III, 637.
 McCulloch, W. S. See De Barenne, J. G. D.
 McCullough, J. A. L., and Sutherland, C. G., case of epiphyseal dysplasia punctularis (stippled epiphyses) without hypothyroidism, III, 873.
 McCullough, J. D., existence of a selenium iodide, I, 128. Bromine-bromine distance in the dibromides of *cis*- and *trans*-stilbene, I, 199.
 Macumber, H. H. See Bisgard, J. D.
 MacCurtin, T., and Reilly, J., sclerotiorin, a chlorinated metabolic product of *Penicillium sclerotiorum*, Van Beyma, III, 868.
 McCutcheon, A. See Cuthbertson, D. P.
 McCutcheon, J. W., Wijs iodine method, II, 319. Linolenic acid and its isomerides, II, 363.
 McCutcheon, M. See Mallery, O. T., jun.
 McDaniell, L. E. See Woolley, D. W.
 McDaniell, P. W. See Langer, L. M., and Mitchell, A. C. G.
 MacDermot, H. E. See Halpenny, G. W.
 McDermott, J. G. See Grieve, J. G.
 Macdonald, A., sulphamethylthiazole in staphylococcal infections, III, 861.
 and Stephen, G. M., changes in stored blood, III, 92.
 Macdonald, A. J., nitrogen balance of laying pullets, III, 326.
 McDonald, C. H. See Boyle, R. W.
 Macdonald, D., test for liver reserve, III, 416.
 Macdonald, D. G. H., and McHenry, E. W., rat bradycardia [from vitamin-B deficiency treated with thiamin], III, 593.
 McDonald, E. J., and Jackson, R. F., structure of difructose anhydride III (difructofuranose 1:2':2:3'-anhydride), II, 206.
 Macdonald, E. J., and Macdonald, F. A., evaluation of cancer control methodology, III, 671.
 Macdonald, F. A. See Macdonald, E. J.
 McDonald, H. J. See Seltz, H.
 McDonald, J. G., avian bone marrow with particular reference to red cell development III, 467.
 McDonald, J. J., and Anson, B. J., variation in origin of arteries derived from aortic arch in American whites and negroes, III, 781.
 McDonald, J. R., and Mayo, C. W., atrophy of cremaster muscle, III, 1.
 and Waugh, J. M., chronic lymphatic leukemia with infiltration into endometrium, III, 790.
 McDonald, J. W., Brown, A. W., and Bronstein, I. P., background and social adjustment of thyroid-deficient children receiving glandular therapy, III, 726.
 McDonald, R., and Adler, F. H., effect of anoxemia on dark adaptation of normal and of vitamin-A-deficient subjects, III, 116.
 Macdonald, S. F. See Fischer, Hans.
 McDonough, K. B. See Anderson, H. D.
 MacDongall, F. H., Brønsted's criticism of classical thermodynamics, I, 361.
 McDowall, R. J. S., circulation and shock, III, 794.
 McDowell, A. J., incidence of cancer in Pittsburgh and Allegheny County, Pennsylvania, 1937, III, 855.
 McDowell, A. M., and Vassos, G. A., jun., comparison of starch paste and albumin mixture as agents for routine mounting of paraffin sections, III, 702.
 MacDowell, E. C. See Allen, E.
 McDowell, H. D. See Nichols, S. H., jun.
 McDowell, W. H., and Kenyon, W. O., relationships between polyvinyl acetates and alcohols, II, 151.
 McEachern, C. G., Manning, G. W., and Hall, G. E., experimental coronary occlusion, III, 631.
 See also Manning, G. W.
 McEachern, G. C. See Steinbocker, O.
 McEachern, K. D. See Scholtz, J. R.
 McElligott, G. L. M. See Cockkiss, A. J.
 McElvain, S. M. See Barnes, H. M., Foreman, E. L., Johnson, P. R., and Walters, P. M.
 McEuen, C. S. See Noble, R. L.
 McEwen, C. See Hensch, P. S.
 McEwen, E. G., Harrison, S. P., and Ivy, A. C., tachyphylaxis to renin, III, 102.
 See also Ivy, A. C.
 McEwen, R. S., development of swim bladder in *Hemichromis bimaculata*, III, 783.
 Macey, H. H., clay-water relationships, I, 439.
 MacFadyen, D. A., and Murphy, J. B., study of induced interference with transplantable tissue growth, III, 425.
 MacFadyen, D. A., Sturm, E., and Murphy, J. B., inhibition of transplantable mouse tumour growth by tissue extracts and their protein fractions, III, 425.
 See also Farr, L. E., and Van Slyke, D. D.
 Macfarlan, D., speech hearing and speech interpretation tests, III, 492.
 MacFarland, R. A., and Goldstein, H., biochemistry of manic-depressive psychosis, III, 22.
 Graybiel, A., Liljencrantz, E., and Tuttle, A. D., analysis of physiological and psychological characteristics of 200 civil air line pilots, III, 635.
 and Halperin, M. H., relation between foveal visual acuity and illumination under reduced oxygen tension, III, 575.
 See also Goldstein, H., and Huddleson, J. H.
 MacFarlane, A. S., electrical double layer and virus stability, III, 259.
 and Macfarlane, M. G., effect of lipin solvents on vaccinia virus, III, 172.
 Macfarlane, M. G., Amies, C. R., and Eagles, G. H., physical and chemical examination of vaccinia virus, III, 268.
 See also Hopwood, F. L.
 MacFarlane, D. See Lendrum, A. C.
 Macfarlane, M. G., and Dolby, D. E., enzymic activity of vaccinal elementary bodies, III, 937.
 See also MacFarlane, A. S.
 MacFarlane, W. D. See Froman, D. K., and Shaw, J. L. D.
 MacFayden, J. See Huggins, C.
 Macfie, J. M., Bacharach, A. L., and Chance, M. R. A., 2-methyl-1:4-naphthaquinone in obstructive jaundice, III, 185.
 McGarry, H. H., tetania parathyreopriva, III, 895.
 McGavack, T. H., masculinising and non-masculinising carcinomata of cortex of adrenal gland, III, 411.
 McGee, L. C., and Martin, J. E., jun., limitations of renal function determination, III, 666.
 Martin, J. E., jun., Levy, F., and Purdum, R. B., influence of alkalis on renal function, III, 221.
 McGibbon, J. P. See McMichael, J.
 MacGillavry, C. H., diffraction of convergent electron beams, I, 151. Dynamical theory of electron diffraction by crystal lattice, I, 246.
 McGinnis, (Miss) N. A. See McRae, J. A.
 McGlade, H. B., improvements in Harvard spring kymograph, III, 778.
 McGlone, B. See Burton, A. C.
 McGookin, A., Robertson, A., and Whalley, W. B., chemistry of the "insoluble red" woods. I. Pterocarpin and homopterocarpin, II, 287.
 Swift, S. R., and Tittensor, E., orientation problems. III. 4:6-Dinitro-*o*-toluidine, II, 273.
 MacGowan, J. J. See Gotten, H. B.
 McGowan, J. P., nicotinic acid, pentose nucleotides, and anaemia, III, 6.
 McGrath, A. C. See Nevius, W. B.
 McGrath, J. W., M₁ and M₂ X-ray absorption edges of lead, I, 1.
 McGraw, M. B., swimming behaviour of human infant, III, 197. Neural maturation as exemplified in achievement of bladder control, III, 802.
 McGreer, J. T. See Peck, W. S.
 McGregor, J. S. See Shepley, W. H.
 McGregor, T. N. See Bishop, P. M. F.

- McGuigan, H. A. See Blickensdorfer, P.
- McGuinness, A. C., Bradford, W. L., and Armstrong, J. G., production and use of hyperimmune human whooping-cough serum, III, 453.
- See also Katsampes, C.
- McGurl, F. J. See McCullagh, E. P.
- Machabelli, A. I., heterogeneous induction of the extremity in *Triton vittatus*, III, 278.
- McHardy, G. See Browne, D. C.
- McHargue, J. S., and Offutt, E. B., still for producing metal-free distilled water, I, 274.
- McHarness, R. C. See Benning, A. F.
- Machatschki, F. See Hägele, G.
- Macheboeuf, M. A., and Dizerbo, L., simplified method for obtaining acid-precipitable lipoprotein from serum, III, 560.
- and Duboy, J., precipitation of serum-albumins and accompanying lipins by ammonium sulphate as a function of the p_H , III, 607.
- and Faure-Beaulieu, M., existence in tubercle bacilli of complex phosphatide acids composed of glycerophosphoric acid esterified by fatty acids and nitrogen-free polyalcohols, III, 170.
- and Mandoul, R., isolation of toxic substance from extract of *Ascaris megaloccephala*, III, 524.
- and Perrimond-Trouchet, R., physiological rôle of bile salts; synthesis of lipin-protein synapses by a mixture of proteins and soaps in presence of bile salts, followed by elimination of the bile salts by dialysis, III, 221. Physiological rôle of bile salts; effect of bile salts on passage of fatty acids across dialysing membranes, III, 607.
- and Tayaue, F., physicochemical state of lipins in milk, III, 420.
- Machella, T. E., and Higgins, G. M., effects of sulphanilamide, neoprontosil, and sulphapyridine on the erythrocyte count of white rats, III, 331.
- Higgins, G. M., and Mann, F. C., rôle of food intake in restoration of liver following partial hepatectomy in albino rats, III, 665.
- See also Higgins, G. M.
- McHenry, E. W., and Gavin, G., effects of a beef-liver fraction on fat synthesis in rats, III, 517. Effects of liver and pancreas extracts on fat synthesis and metabolism, III, 754.
- See also Gavin, G., Longenecker, H. E., MacDonald, D. G. H., and MacLean, D. L.
- McHenry, J. T., Ampt, G. A., and Heymann, E., precipitation of barium sulphate in presence of ammonium chloride, I, 231.
- Machler, R. C., potentiometer circuit for portable optical pyrometer, I, 133. Recording microphotometer, I, 330.
- Macht, D. I., comparative pharmacology of menthol and its isomeride, III, 154.
- and Brooks, D. J., prolonged administration of cobra venom in relation to kidney and liver function, III, 66.
- Harden, W. C., and Grumbein, M. L., toxicology of Congo-red, III, 11.
- and Macht, M. B., comparative effect of cobra venom and opiates on vision, III, 25. Comparative effect of cobra venom and other analgesics on mental efficiency, III, 200. Quantitative measurement of pain sensation, III, 298. Pain threshold after administration of various drugs, III, 602.
- Macht, D. I., Sherman, S., and Brooks, D. J., effect of repeated injections of cobra venom on blood chemistry and morphology, III, 707.
- Macht, M. B., behaviour of rats in maze in relation to analgesic effect of cobra venom and morphine, III, 334. Effect of repeated injections of cobra venom and morphine on behaviour of rats in maze, III, 334.
- See also Macht, D. I.
- Macias, A. C. See Mellish, C. H.
- McIlvaine, H. R. C., and Popp, H. W., growth-substances in relation to mechanism of action of radiation on plants, III, 942.
- McIlwain, H., specificity of glutamine for growth of *Streptococcus hemolyticus*, III, 169. Nutrition of *Streptococcus hemolyticus*; growth in chemically defined medium; need for vitamin-B₆, III, 454. Pyridine-3-sulphonic acid and its amide as inhibitors of bacterial growth, III, 611.
- MacInnes, D. A. See Longworth, L. G.
- MacIntosh, C. A., extrapleural pneumothorax, III, 195.
- MacIntosh, F. C. See Harvey, A. M.
- McIntosh, J., and Selbie, F. R., application of the Sharples centrifuge to study of viruses, III, 614.
- See also Selbie, F. R.
- McIntosh, J. F., and Sutherland, C. G., use of colloidal aluminium hydroxide in treatment of peptic ulcer, III, 414.
- See also Baxter, H.
- McIntosh, R., and Donovan, E. J., disturbances of rotation of intestinal tract, III, 2.
- See also Dacey, J.
- McIntosh, R. L., Mead, D. J., and Fuoss, R. M., conductivity of salts in chlorobenzene at 25° I, 219.
- McIntyre, A. K., quick component of nystagmus, III, 111. Electrometrography, III, 849.
- McIntyre, A. R. See Burke, J. C., Tollman, J. P., and Wagner, J. C.
- McIntyre, G. H., and Bozzin, M., rapid determination of quartz in felspar, I, 371.
- McIntyre, J. P., artificial pneumoperitoneum in pulmonary tuberculosis, III, 887.
- McJunkin, F. A. See Ferguson, R. L., and Tweedy, W. R.
- Mack, E. G. See Boyd, E. M.
- Mack, P. B., O'Brien, A. T., Smith, J. M., and Bauman, A. W., X-ray method for estimating degree of mineralisation of bones, III, 86.
- and Sanders, A. P., vitamin-A status of families in widely different economic levels, III, 592.
- McKay, A. F. See Heard, R. D. H.
- MacKay, E. M., use of urea in treatment of warts, III, 605.
- Barnes, R. H., and Bergman, H. C., influence of insulin on protein metabolism as measured by nitrogen balance, III, 148.
- Barnes, R. H., Carne, H. O., and Wick, A. N., ketogenic activity of acetic acid, III, 918.
- and Wick, A. N., influence of adrenalectomy on blood- and urine-ketones during fasting and anterior pituitary extract administration, III, 210.
- Wick, A. N., and Barnum, C. P., ketogenic action of short-chain, even-numbered carbon fatty acids in carbohydrate-fed animals, III, 918.
- MacKay, E. M., Wick, A. N., and Carne, H. O., relative amount of hepatic glycogen deposited by glucose, glycine, and *dl*-alanine, III, 327. Antiketogenic and glycolytic activity of citric acid, III, 434.
- See also Sherrill, J. W.
- Mackay, H. M. M., soya-bean flour with dried milk, as substitute for breast milk, III, 510.
- Mackay, I. F. S., composition of alveolar air, III, 388.
- Mackay, R. P., congenital demyelinating encephalopathy, III, 721.
- McKechnie, R. E. See Corbould, I.
- McKee, C. M., Rake, G., Greep, R. O., and Van Dyke, H. B., therapeutic effect of sulphathiazole and sulphapyridine, III, 330. Toxicology of sulphathiazole and sulphapyridine, III, 330.
- See also Rake, G.
- McKee, G. M., and Cipollaro, A. C., Roentgen dosage in dermatology expressed in international Roentgens, III, 342.
- McKee, R. W., Binkley, S. B., Thayer, S. A., MacCorquodale, D. W., and Doisy, E. A., vitamin-K₂, III, 146.
- See also Binkley, S. B., MacCorquodale, D. W., Richard, D., and Thayer, S. A.
- McKee, S. H., gonorrhoeal ophthalmia neonatorum treated with sulphanilamide, III, 331.
- McKeehan, L. W., ferromagnetic anisotropy in body-centred cubic iron-nickel alloys, I, 156. Consistent notation for point positions in space-group, I, 245. Short table of quantities used in computations for cubic space lattices, I, 349. Optical and magnetic properties of magnetite suspensions; surface magnetisation in ferromagnetic crystals, I, 350.
- McKeever, C. H. See Fuson, R. C.
- McKenzie, A., and Winton, E. R., action of Grignard reagents on methyl *r*-tropate and atropate, II, 310.
- Mackenzie, C. G., and McCollum, E. V., cure of nutritional muscular dystrophy in the rabbit by α -tocopherol: its effect on creatine metabolism, III, 858.
- Mackenzie, J. B., and McCollum, E. V., occurrence of tremors and inco-ordination in vitamin-E-deficient rats, III, 714.
- MacKenzie, D. W., jun., Whipple, A. O., and Wintersteiner, M. P., direct observations on circulation of blood in transilluminated mammalian spleens, III, 709.
- McKenzie, F. F. See Andrews, F. H.
- Mackenzie, J. B. See Mackenzie, C. G.
- Mackenzie, J. C. H., Page, A. P. M., and Ward, E. M., sulphonamides in Pfeiffer bacillus meningitis, III, 676.
- McKenzie, K. G., post-operative results in lesions involving spinal cord and cauda equina, III, 636.
- MacKenzie, K. R. See Corson, D. R.
- MacKenzie, R. See Murray, G.
- Mackenzie, R. D. See Findlay, G. M.
- McKeon, W. M., and Wright, W. D., characteristics of protanomalous vision, III, 803.
- McKeown, A. See Griffith, R. O.
- McKeown, T., and Spurrell, W. R., adrenalectomy and pregnancy of albino rat, III, 643.
- McKibbin, J. M., Madden, R. J., Black, S., and Elvehjem, C. A., importance of vitamin-B₆ and factor W in nutrition of dogs, III, 429.
- See also Waisman, H. A.

- Mackie, F. P., [pyrethrum for killing] insects in aircraft, III, 61.
- Mackie, T. T., Eddy, W. H., and Bach, R., clinical value of quantitative vitamin determinations, III, 319.
- McKinley, D. W. R., measurement of small optical activities with the quartz crystal light modulator, I, 40.
- McKinney, D. S. See Ablard, J. E.
- Mackinney, G., criteria for purity of chlorophyll preparations, III, 368.
- and Joslyn, M. A., conversion of chlorophyll into phaeophytin, II, 109.
- See also Pace, N., and Weast, C. A.
- McKinney, H. H. See Thornberry, H. H.
- McKinney, J. McD., and Frocht, M., Adie's syndrome; non-lucetic disease simulating tabes dorsalis, III, 484.
- McKinney, R. A. See Mellon, R. R.
- MacKinnon, F. See Bethell, F. H.
- McKinstry, H. E., origin of the "Jasper Bars" of Western Australia, I, 47.
- McKittrick, J. B., serial blood-sugar determinations in normal newborn infants, III, 472.
- Macklin, C. C., transport of air along blood-vessel sheaths, III, 99.
- Macklin, M. T., sex ratios in families with hemophilia, III, 706.
- MacLachlan, E. See Shohl, A. T., and Talbot, N. B.
- MacLachlan, P. L., effects on blood-lipids of short exposure to low atmospheric pressure, III, 106. Effect of arsenicals on liver-lipids of rabbits, III, 927.
- MacLachlan, W. W. G. See Bracken, M. M.
- MacLagan, N. F., galactose tolerance as test of liver function, III, 585.
- and Rundle, F. F., liver function in thyrotoxicosis, III, 845.
- See also Cade, S.
- McLain, P. L., hemolytic effects of ethyl and caprylic alcohol, III, 379, 627.
- McLaughlin, C. W. See Sharpe, J. C.
- McLaughlin, T. G., pegmatite dykes of the Bridger Mountains, Wyoming, I, 179.
- McLay, A. B. See Crawford, M. F.
- MacLay, E., and Osterberg, A. E., separation of serum-albumin and -globulin, III, 882.
- MacLay, W. D., Hann, R. M., and Hudson, C. S., rotatory power of zinc lactate, II, 5.
- MacLean, A. See Richter, C. P.
- MacLean, A. R., Horton, B. T., and Moersch, F. P., importance of postural vascular studies in exhaustive states, III, 794.
- MacLean, D. L., Sheppard, M., and McHenry, E. W., tissue changes in ascorbic acid-deficient guinea-pigs, III, 235.
- See also Barrett, H. M.
- McLean, F. C. See Ross, E. S.
- Maclean, I. S., and Nunn, L. C. A., fat-deficiency disease of rats; effect on fat metabolism of methyl arachidonate and linoleate; determination of arachidonic acid, III, 672.
- See also Hevesy, G. C., and Hume, E. M.
- McLean, J. See Little, A. J.
- McLean, (Miss) M. J., and Seeger, (Miss) D. R., differences observed in the behaviour of unsaturated hydantoin towards bromine, II, 314.
- See also Hahn, (Miss) D. A.
- McLean, R. S., and Ireland, E. J., rapid staining methods in plant histology, III, 940.
- McLean, W. B., Ellett, A., and Jacobs, J. A., distribution in angle of the long-range α -particles from fluorine bombarded with protons, I, 426.
- McLeish, C. W., plotting electron distribution curves for the F layer, I, 277.
- McLellan, A., pituitary extract and non-gravid human uterus, III, 901.
- McLellan, F. See Plummer, N.
- MacLennan, D., non-saccharolytic plectridial anaerobes, III, 354.
- McLennan, G. C. See Hurst, E. W.
- McLennan, I. C. See Miller, (Miss) C. C.
- MacLeod, C. M., chemotherapy of pneumococcal pneumonia, III, 599.
- Mirick, G. S., and Curneen, E. C., toxicity for dogs of bactericidal substance derived from soil bacillus, III, 761.
- See also Erf, L. A., and Farr, L. E.
- MacLeod, F. L. See Williams, D. E.
- MacLeod, J., metabolism of human spermatozoa, III, 217.
- and Summerson, W. H., graphical method for determining Warburg vessel constants at various fluid volumes, III, 619.
- McLeod, J. W. See Cooper, K. E., and Gordon, J.
- MacLeod, L. D., and Reiss, M., brain respiration and glycolysis in cardiazol convulsions, III, 721.
- MacLeod, R. B., brightness-constancy in unrecognised shadows, III, 723.
- McLeod, W. M., and Wagers, R. P., respiratory system of the chicken, III, 105.
- McLimans, W. F. See Larson, W. P.
- McLure, W. P. See Palmer, G. D.
- McMahon, B. C., Hartung, E. J., and Walbran, W. J., membrane permeability. II. Adsorption of sucrose and two salts on cupric ferrocyanide, I, 210.
- MacMahon, C. E. See Cope, O.
- McMann, W., hypersensitivity to solution of posterior pituitary, III, 207.
- McMaster, H., and Pool, M. L., improvements in a Geiger-Müller counting system, I, 376.
- McMeekan, C. P., growth and development in the pig, with special reference to carcass quality character. I. II. Influence of the plane of nutrition on growth and development, III, 504, 748.
- McMichael, J., rapid method of determining lung capacity, III, 478.
- and McGibbon, J. P., postural changes in lung volume, III, 478.
- McMillan, E., seven-day uranium activity, I, 384.
- and Abelson, P. H., radioactive element 93, I, 340.
- See also Borsook, H.
- McMillan, G. W. See Wall, F. T.
- McMillan, R. M. See Foss, H. L.
- McMillion, T. M., old Gruebler hæmatoxylin and eosin compared with current American stains, III, 837.
- McMurdie, H. F., and Bunting, E. N., X-ray studies of compounds in the system PbO-SiO_2 , I, 27.
- McMurry, H. L., and Mulliken, R. S., long-wave-length absorption of the carbonyl group, I, 345.
- McMurtrey, J. E., jun. See Engle, H. B.
- MacNair, V., effect of dietary supplement on ossification of bones of wrist in institutional children. II. Effect of cod-liver oil supplement, III, 697.
- McNamara, D. H. See Brown, C. E.
- McNamara, H., and Senn, M. J. E., glutathione and red cells in blood in infancy and childhood, III, 628.
- See also Gordon, H. H.
- McNamara, W. L., Murphy, B., and Gore, W. A., simultaneous fixation and decalcification of bone, III, 786.
- See also Detrick, L. E.
- McNatt, E. M., X-ray dispersion in copper crystals, I, 286.
- McNaught, J. B., Beard, R. R., and De Eds, F., phenothiazine in experimental trichinosis, III, 332.
- MacNaughton, I. P. J., and Peet, E. W., differential stain for hair cells, III, 400.
- McNeal, W. J., hyperthermia, III, 224.
- McNeil, D. See Kent, A.
- MacNevin, W. M., and Baxley, W. H., bomb determination of organic chlorine by lime-fusion method, II, 263.
- and Bournique, R. A., precision of the micro-electrolytic determination of copper, I, 373.
- McNew, G. L., and Spencer, E. L., effect of nitrogen supply of sweet maize on the wilt bacterium, III, 362.
- McNulty, B. J. See Hughes, E. D.
- MacPhail, M. R., anomalous scattering of fast neutrons, I, 277.
- Macpherson, A. I. S., McCallum, E., and Haultain, W. F. T., vitamin-K and cerebral hæmorrhage in new-born, III, 789.
- and Robertson, E. M., clinical use of triphenylchloroethylene, III, 655.
- MacPherson, C. F. C., and Heidelberger, M., preparation and immunological properties of acid-denatured egg albumin, III, 774.
- McPherson, D. C., cortical air spaces in the roots of *Zea mays*, III, 614.
- MacPherson, H. G., carbon arc as a radiation standard, I, 374.
- Macpherson, I. See Agar, H.
- McPherson, L., optical constants of the copper-aluminium α -alloys, I, 250.
- MacPhillamy, H. B. See Ansbacher, S., and Fernholz, E.
- McQuarrie, I., Ziegler, M. R., Stone, W. E., Wangenstein, O. H., and Dennis, C., mechanism of insulin convulsions. III. Effects of varying partial pressures of atmospheric gases after adrenalectomy, III, 413.
- See also Hansen, A. E.
- MacQuiddy, E. L., Tollman, J. P., La Towsky, L. W., and Schonberger, S., tissue reaction to carbon arc dusts, III, 257.
- See also Tollman, J. P.
- McRae, D. R. See Komarov, S. A., and Langstroth, G. O.
- McRae, J. A., and McGinnis, (Miss) N. A., derivatives of substituted succinic acids. IV. Action of alkaline sodium hypobromite on some α -alkyl- α' -arylsuccinamides, II, 233.
- Macrae, T. F. See Chick, H., and El Sadr, M. M.
- McRary, W. L. See Harreveld, A. van.
- McReynolds, A. W. See Rogers, M. M.
- McReynolds, J. P., acid-base reactions in non-protonic solvents, I, 368.
- See also Bailar, J. C., jun.
- McReynolds, R. C. See Hillis, F. W.
- McShan, W. H., and Meyer, R. K., relation of the follicle-stimulating activity of fresh pituitary to the action of enzymes in the tissue, III, 401.

- McSweeney, C. J., sulphapyridine and serum in pneumonia, III, 919.
- McSwiney, B. A., assessment of physical fitness, III, 340.
See also Card, W. I.
- McVay, C. E., and Anson, B. J., composition of rectus sheath, III, 697. Aponeurotic and fascial continuities in abdomen, pelvis, and thigh, III, 697.
- Macy, I. G., Hummel, F. C., Hunscher, H. A., Shepherd, M. L., and Souders, H. J., effects of simple dietary alterations on retention of positive and negative minerals by children, III, 856.
- Reynolds, L., and Souders, H. J., effect of carmine in gastro-intestinal motility of children, III, 500.
See also Beach, E. F., Shepherd, M. L., Souders, H. J., and Stern, Adolph.
- Madaeva, O. S., Uschakov, M. I., and Koscheleva, N. F., 6-methyl- Δ^4 -androsterone-3:17-dione, II, 376.
See also Uschakov, M. I.
- Madaus, G., and Koch, F. E., antibacterial action of *Folia uva ursi* in urine, III, 61. Cardiac and side actions of red and white *Scilla maritima*, III, 924.
- Madden, E. E. See Hutton, J. H.
- Madden, J. F., cholesterol balance and low-fat diet in psoriasis, III, 149.
- Madden, R. J. See Axelrod, A. E., and McKibbin, J. M.
- Madden, S. C., Finch, C. A., Swalbach, W. G., and Whipple, G. H., plasma-protein production and utilisation; influence of amino-acids and sterile abscesses, III, 471.
- Noehren, W. A., Waraich, G. A., and Whipple, G. H., blood plasma-protein production as influenced by amino-acids, III, 95.
- Madding, G. F., Binger, M. W., and Hunt, A. B., post-partum urinary suppression, III, 667.
- Maddison, L. See Hilditch, T. P.
- Maddock, A. J., evaluation of radiation intensities by a simplified spectrographic method, I, 271.
- Maddock, S. See White, F. W.
- Maddox, D. See Ascham, L.
- Madigan, C. T. [with Alderman, A. R.], boxhole meteoritic iron, Central Australia, I, 237.
- Madinaveitia, J., diffusing factors. V. Separation from proteolytic enzymes in culture filtrates of *Clostridium welchii*, III, 534.
- and Quibell, T. H. H., diffusing factors. VI. Action of testicular extracts on viscosity of vitreous humour preparations, III, 534.
- Todd, A. R., Bacharach, A. L., and Chance, M. R. A., mucolytic activity of diffusing factor preparations, III, 791.
See also Evans, M. G.
- Madison, L. C., Miller, R. C., and Keith, T. B., nicotinic acid in swine nutrition, III, 51.
- Madlener, M. J. See Werle, E.
- Madsen, H., does rabbit chew the cud? III, 39.
- Maecker, H., continuous spectrum of the carbon arc, I, 183.
- Maercks, O. See Hanle, W.
- Maes, J. P., neural mechanism of sexual behaviour in female cat, III, 125.
- Maffei, S. See Crippa, G. B.
- Maffione, R. See Montalti, M.
- Magat, M. See Ochs, (Mlle.) L.
- Magath, T. B., prothrombin time determination, III, 10.
See also Berkson, J., Matthews, M. W., and Randall, L. M.
- Magee, C. S. See Gesell, R.
- Magee, J. L., DeWitt, T. W., Smith, (Miss) Elizabeth G., and Daniels, F., photocalorimeter; quantum efficiency of photosynthesis in algae, I, 132.
- Magee, J. W. [with Henze, H. R.], disubstituted aminoacetones containing two dissimilar substituents, II, 222.
See also Henze, H. R.
- Magee, W. See St. George, A. V.
- Magidson, O. J., Fedotova, M. V., and Zverev, V. V., quinoline compounds as basic substances for preparation of medicinal products. VIII. Anaesthetics of the cinchonamide series, II, 190.
- Magnan, C. See Bierry, H.
- Magnusson, J. H., white blood picture during first year of life, III, 879. White cell count in first year of life, III, 880.
and Hamne, B., macrocytic hyperchromic anemia in children, III, 878.
See also Kling, C.
- Magoffin, J. E. See Burdett, P. H.
- Magoun, H. W., and Ranson, S. W., retrograde degeneration of supraoptic nuclei after section of infundibular stalk in monkey, III, 393.
See also Brobeck, J. R., Pitts, R. F., and Ranson, S. W.
- Magyar, I., excretion of vitamin-B₁ after intravenous administration, III, 321. Vitamin-B₁ in urine and serum in disease and deficiency, III, 593.
- Mahadevan, G., structure of uterus and placenta of Indian clasmobranchs, III, 464. Structure of uterus and placenta of a few Indian clasmobranchs, III, 659.
- Mahajan, L. D., liquid drops, I, 209.
- Mahan, J. E. See Wolfrom, M. L.
- Mahanti, P. C., and Sengupta, A. K., isotope effect in the band spectrum of tin monoxide, I, 192.
- Mahaux, J., effect of thyrotrophic hormone on rabbits, III, 404. Effect of serum of rabbits with metabolism decreased by prolonged administration of thyrotrophic hormone on the basal metabolism of normal rabbits, III, 404.
- Maheshwari, J. C. See Bhatnagar, S. S.
- Mahlo, A., blood transfusion problems, III, 186.
- Mahoney, J. F. See Baehr, G.
- Mahoney, J. J., embryology and postnatal development of prostate gland in female rat, III, 834.
- Mahr, C., and Ohle, H., volumetric determination of chlorate and bromate, I, 37. Volumetric analysis by means of thiocarbamide. II. Volumetric determination of manganese dioxide, lead dioxide, and per-compounds, I, 39. Complex salts of thiocarbamide with lead and thallium, II, 71.
- Maier, C. See Löffler, W.
- Maier, E., clinical use of von Christiani's enzymes, III, 317.
and Christiani, A. F. von, carcinoma metabolism, III, 590.
- Maier, I. See Wilson, G. S.
- Maier, K. See Brockmann, H.
- Maier, N. R. F., and Glaser, N. M., abnormal behaviour in rat. II. Comparison of convulsion-producing situations, III, 721.
- Maignon, F., complement function, defence mechanism against protein adulteration of the blood, III, 379.
- Main, E. R., Shinn, L. E., and Mellon, R. R., anticalase activity of sulph-anilamide and related compounds. IV. Peroxide accumulation and growth inhibition in pneumococcus. V. Bacteriostatic activity of some sulphon-hydroxides, III, 246, 756.
See also Shinn, L. E.
- Main, R. J., nebuliser for inhalation experiments, III, 550.
- Mainini, C. G., fall in blood-chloride due to intraperitoneal injection of urea solutions, III, 335.
- Mainland, D., ligaments, III, 277.
- Mainwaring, B. R. S. See Aylward, F. X., and Wilkinson, J. F.
- Mainzer, F., quantitative relationship between chloride and sodium excretion in urine, III, 313.
and Krause, M., changes of electrocardiogram during antimony treatment, III, 526.
- Maisin, J., prophylaxis of cancer, III, 422.
- Pourbaix, Y., and Camerman, J., prophylaxis of benzpyrene cancer; effect of vitamin-B₁, nicotinamide, and a phosphorylation system, III, 316.
- Pourbaix, Y., and Cuvelier, E., prevention of cancer induced by *o*-aminoazotoluene and dimethylaminoazobenzene by real meal, III, 589.
- Pourbaix, Y., and Van de Voorde, C., prophylaxis of benzpyrene tumours; action of sodium glycuronate, III, 316.
- and Tang, Y. H., effect of hydrated acetaldehyde or diformaldehyde peroxide on anaphylactic shock in guinea-pig, III, 614.
- Maison, G. L., genesis of ischaemic pain; influence of potassium, lactate, and ammonium ions, III, 198.
See also Rusch, H. P.
- Maizels, M., and Whittaker, N., preservation of stored food, III, 92. Effects of storage on human erythrocytes, III, 378. Diluents for stored blood, III, 471.
See also Brewer, H. F., and Himsworth, H. P.
- Majewski, W., excitation of oscillations by means of a dynatron in a circuit with uniformly distributed electrical constants, I, 58. Technique of the measurement of secondary emission of electrons, I, 83.
- Major, R. H., effect of sulphanilamide compounds on endocarditis, III, 758.
and Weber, C. J., platelet-reducing substance in spleen of thrombocytopenic purpura, III, 13.
- Weber, C. J., and Rumold, M. J., blood-"guanidine," III, 95.
- Major, R. T. See Williams, R. J.
- Majumdar, A. K., quinaldine acid as reagent for separation and determination of copper and cadmium, I, 81.
- Majumdar, B. See Chakravarti, D.
- Majumdar, B. N., assimilation of carotene by rats from a fat-free diet, III, 320.
- Makarevskaja, E. A., and Iluridze-Moltschan, K. M., catalase in vine cuttings lying in store or making their union with the stock, III, 692.
- Makarov, E. S. See Kuznetsov, V. G.
- Makens, R. F., and Eversole, W. G., kinetics of the thermal decomposition of ethyl formate, I, 28.

- Maki, T., and Kitamura, S., vat dyes of the flavanthrone series. III, II, 135.
- Makino, K. See Morii, S.
- Makris, C. G., and Menaché, R., rapid micro-determination of silver by a method based on colloid colorimetry, I, 300.
- Malachowski, R., reactions of carbonyl cyanide, I, 171.
- Malaguzzi-Valeri, C., emulsin, III, 72. See also Mazza, F. P.
- Malakar, M. C. See Basu, K. P.
- Malamani, V. See Schlomka, G.
- Malamos, B. See Bock, H. E.
- Malamud, N., and Boyd, D. A., Pick's disease, with atrophy of temporal lobes: clinico-pathologic study, III, 721.
- Malandkar, M. A. See Sokhey, S. S.
- Malaprade, L., volumetric determination of bismuth, and of the free acidity of solutions of bismuth salts, I, 175. Isolation of alkali argentoperiodates, complexes of trivalent silver, I, 263.
- Malatesta, L., electric moment of xanthates and of dithiocarbamates. I. Arsenic xanthates and dithiocarbamates, I, 58. Dithiocarbamates of metals of group VI, II, 38. See also Cambi, L.
- Malec, J. P. See Lemmer, K. E.
- Malek, I., effect of the sugar-lipin O- and vi-antigens on R strains of *B. typhosus*, III, 356. Preparation of O- and vi-antigens; serological reactions; antigenic properties, III, 356. Relationship between structure and virulence in *B. typhosus*, III, 357.
- Malenok, N. M., condensation of phenylacetylene with methyl propyl ketone, II, 169.
- and Sologub, I., synthesis of phenylacetylenylhexylcarbinol [γ -hydroxy- α -phenyl- Δ^8 -noninene], II, 343.
- Malevskaja, S. See Krestinski, V. N.
- Malk, A. Q. See Bakshsh, I.
- Malishev, V. I., frequency of the hydroxyl group in binary mixtures. III. Combination spectra of solutions of methyl alcohol in benzene, chlorobenzene, fluorobenzene, acetone, dioxan, ethyl ether, isoamyl ether, pyridine, and piperidine, I, 56. See also Landsberg, G. S.
- Malkiel, S. See Mason, J. P.
- Malkov, A. M., and Kal, V. V., reversible action of pyrophosphatase, III, 73.
- Mallery O. T., jun., and McCutcheon, M., motility and chemotaxis of leucocytes in health and disease, III, 879.
- Mallinckrodt-Haupt, A. S. von, surface and depth growth in cultures, III, 352.
- Mallinson, F. B., pregnancy—a contra-indication to spinal analgesia, III, 926.
- Mallonee, R. E. See Schutz, P. W., and Small, L.
- Mallory, F. B., and Parker, F., jun., fixing and staining methods for lead and copper in tissues, III, 467.
- Mallory, G. K., Crane, A. R., and Edwards, J. E., pathology of acute and of healed experimental pyelonephritis, III, 813.
- Mallory, T. B., Gall, E. A., and Brickley, W. J., chronic exposure to benzene. III. Pathological results, III, 68.
- Mallozzi, E. D. See Greenberg, S.
- Mallya, M. V. See Vidyarthi, N. L.
- Malmberg, M. See Euler, B. von, and Euler, H. von.
- Malmberg, N., glucose treatment of diarrhoea in childhood, III, 907.
- Maloney, A. H., toxicity of pentothal sodium and its treatment, III, 154.
- Maloney, L. S. See Milas, N. A.
- Malorny, G. See Behrens, B.
- Malov, N. N., electrical properties of blood under the influence of decimetre waves, III, 342.
- Malowan, L. S., detection of gold, I, 175. Inhibition of action of oxidase and peroxidase by hydrocyanic acid, III, 161.
- Malquori, G., and Caruso, E., calcium thio-, chloro-, and nitro-ferrites, I, 227.
- Malsch, F., greatly enlarged X-ray shadow images, I, 286.
- Malsch, J., quasi-crystalline structure of liquids, I, 198.
- Malski, P. G. See Abramov, V. S.
- Malter, A. See Firket, J.
- Maltesos, C., stimulation of pupil-dilating fibres in the cervical sympathetic of rabbits with alternating currents, III, 483. Continuous recording of width of pupil, III, 489.
- and Schneider, M., experimental stimulation of vasodilator nerves, III, 476. Conditions for excitation of vasoconstrictors, III, 476. Responses of vegetative end-organs during nervous and humoral stimulation, III, 483. Experimental stimulation of vegetative systems, III, 483.
- Maltzeva, P. M. See Nekrassov, N. I.
- Malyoth, G., and Kirimilidis, S., value of lactose in infant feeding, III, 856.
- Malzberg, B. See Ross, J. R.
- Mamoli, L., biochemical dehydrogenations in the cortin group, III, 350.
- Koch, R., and Teschen, H., biochemical hydrogenations in steroid group by means of a strain of *Bacillus putrificus*, III, 733.
- Mamotenko, M. F., calculation of energy of repulsion, I, 12.
- Man, E. B., Gildea, E. F., and Peters, J. P., serum-lipins and -proteins in hyperthyroidism; [effect of iodine treatment], III, 407. See also Gildea, E. F., and Riggs, D. S.
- Manca, B., variations of blood-cholesterol with age, III, 13. See also Peretti, G.
- Manchofe, G. W., zinc-protamine-insulin and soluble insulin, III, 899.
- Mancini, A., hypotension due to adrenaline, III, 896.
- Mancini, M. A., and Graubner, W., antagonism between quinine and adrenaline-like substances, III, 862.
- Mancini, R. E. See Varela, M. E.
- Mancke, R., Plötner, K., and Siede, W., prontosil treatment of cholangitis, III, 438.
- Mandach, F. von, action of atophanil and cytotropin in sympathetic ophthalmia, III, 203.
- Mandal, K. L., alleged optical isomerism of 6-co-ordinated cupric salts, I, 63. See also Neogi, P.
- Mandelbaum, H., congenital hæmolytic jaundice, III, 417.
- Mandoul, R., toxicity of liver fluke, III, 524. Isolation of toxic substance from extract of *Ascaris megaloccephala*; biological properties, III, 524. See also Machebœuf, M. A.
- Manduk, W. See Plesiewicz, S.
- Manegold, E., capillary systems. XIX. Specific permeability and pore structure of packed spheres and heaps of spheres or grains, I, 110.
- Manegold, E., and Kalauch, K., capillary systems. XXII. Preparation and characterisation of electropositive membranes, I, 70.
- Maner, R., antagonism of *B. coli* to dysentery bacteria, III, 869.
- Manery, J. F., electrolytes in squid blood and muscle, III, 197.
- Manes, M. See Lehrman, L.
- Manescu, (Mile.) I. See Cauchois, (Mile.) Y.
- Mangenot, G., toxic effects of quinquevalent arsenic compounds on [plant] cells, III, 547.
- and Raison, (Mile.) M., morphological character of gelatinisation of nitrated cellulose membranes, I, 321.
- Manges, J. D. See Larson, C. P.
- Mangini, A., constitution of diazoamino-compounds, II, 12. 3:4-Dinitrotoluene, II, 160.
- Mangun, G. H., and Myers, V. C., creatine, phosphorus, and potassium content of human cardiac and voluntary muscle, III, 888. See also Corsaro, J. F., Meyers, V. C., and Muntwyler, E.
- Mankowich, A., spectrographic analysis at the U.S. naval torpedo station, I, 330.
- Manley, J. H., Haworth, L. J., and Leubke, E. A., vacuum leak testing, I, 134. See also Hornbostel, J.
- Manly, M. L. See Manly, R. S., and Morgareidge, K.
- Manly, R. S., Bonner, J. F., and Hodge, H. C., light scattering in normal human dentine; calculation of absorption and scattering coefficients, I, 352.
- Hodge, H. C., and Manly, M. L., relation of phosphorus turnover of blood to mineral metabolism of calcified tissues as shown by radioactive phosphorus, III, 755.
- Mann, F. C. See Burchell, H. B., Coffey, R. J., Douglas, D. M., Grindlay, J. H., Hester, H. R., Machella, T. E., Mann, F. D., and Wakim, K. G.
- Mann, F. D., and Mann, F. C., chemical inhibitors of gastric acidity, III, 35.
- Mann, F. G., and Purdie, D., constitution of complex metallic salts. XII. Bridged compounds containing two different metallic atoms. XIII. Stability of the 4-covalent auric complex, II, 366. See also Chatt, J., Evans, R. C., and Harley-Mason, J.
- Mann, I., convergence deficiency, III, 802. and Pullinger, B. D., ascorbic acid in mustard gas burns of eye, III, 844.
- Mann, L. S., and Welker, W. H., precipitin antisera for malignant tissue, III, 508. Specific precipitin antiserum for carcinoma protein, III, 855.
- Mann, M. M., Hustrulid, A., and Tate, J. T., ionisation and dissociation of water vapour and ammonia by electron impact, I, 403.
- Mann, P. J. G., and Quastel, J. H., benzadrine and brain metabolism, III, 300. Benzadrine (β -phenylisopropylamine) and brain metabolism, III, 487. Vitamin-B₁₂ and acetylcholine formation in isolated brain, III, 717. See also Saunders, B. C.
- Mann, T., and Keilin, D., sulphanilamide as specific inhibitor of carbonic anhydrase, III, 825. See also Keilin, D.
- Mann, W. See Baehr, G.
- Manneback, C. See Bernard, E.

- Mannelli, G., cerimetric determination of arsenic trihydride, I, 130. Determination and possibility of fractionating the rare earths with 8-hydroxyquinoline, I, 233.
See also Speroni, G.
- Mannheimer, E., and Nordenfelt, P. J., congenital cardiac disease, III, 884.
- Manning, G. W., McEachern, C. G., and Hall, G. E., reflex coronary artery spasm, III, 99.
See also McEachern, C. G.
- Manning, J. F. See Mason, J. P.
- Manning, M. F., and Chodorow, M. I., electronic energy bands in metallic tungsten, I, 12.
- Manning, P. D. V. See Almquist, H. J., and Stokstad, E. L. R.
- Manninger, W., antiseptic action of sodium hypochlorite, III, 922.
- Mannozi-Torini, M., adsorption of diffusing factor in testicular extracts, III, 217.
- Manolescu-Pavlescu, L., colour of 4-hydroxy-2-thio-3-aryl-1:2:3:4-tetrahydroquinazoline, II, 109.
- Manouvrier, J. See Courtois, J.
- Mansell, H. E. See O'Shaughnessy, L.
- Mansfeld, G., and Scheff-Pfeifer, I., oxygen uptake of isolated uninjured surviving organs in respiration chamber, III, 147. Unknown action of thyroid in regulation of the body temperature, III, 208.
- Scheff-Pfeifer, I., and Tyukody, F. von, relations between function and combustion processes in nerve cell, III, 113.
- Manske, R. H. F., alkaloids of fumariaceous plants. XXIV. *Corydalis ochotensis*, Turcz. XXV. *Corydalis pallida*, Pers. XXVI. *Corydalis claviculata* (L.), DC. XXVII. A new alkaloid, cheilanthifoline, and its constitution. XXIII. *Glaucium flavum*, Crantz., III, 238, 262, 369.
and Marion, L., calycanthine. IV. Structural formula, II, 29. Alkaloids of fumariaceous plants. XXIX. Constitution of cryptocavine, II, 360.
- Mansson, S. See Hedvall, J. A.
- Manuel, S. See Chevallier, A.
- Manuilkin, Z. M. See Nanmov, S. N.
- Manuilova, N. A., exhaustion and restoration of inductive power of eye cup in repeated inductions in *Anura*, III, 178.
- Manville, I. A., apple therapy, III, 678.
- Reithel, F. J., and Yamada, P. M., [enzymic] preparation of *d*-galacturonic acid, III, 72.
- Reithel, F. J., Yamada, P. M., Spencer, T. W., and Richardson, John R., detoxication mechanism. I. Ability of apple or its constituents to counteract toxic effects of lead and arsenic, III, 527.
- and Sullivan, N. P., relationship of diet to self-regulatory defence mechanism. III. Organic acids and pectin, III, 585. Bactericidal action of metallic ions in broth containing dehydrated apple, III, 610.
See also Sullivan, N. P.
- Manzoni-Ansidei, R., and Rolla, M., absorption spectrum of pyrrole, thiophen, and furan in the middle infra-red, I, 146.
- and Storto, T., thermochemistry of chelation, I, 218.
- Manzur, M., and Pandya, K. C., condensation of aldehydes with amides. V. *p*-Hydroxybenzaldehyde, II, 44.
- Marangoni, B. A., Burstein, C. L., and Rovenstine, E. A., protecting action of chemicals related to procaine on ventricular fibrillation during cyclopropane anaesthesia, III, 926.
See also Burstein, C. L.
- Marangoni, C. See Bezzi, S.
- Marangoni, P., content of copper in lungs of normal rabbits, III, 712.
- Marano, A., and Vollenweider, C., action of camphor on active mammary gland of rabbit, III, 582.
- Marano, I. See Sagastume, C. A.
- Marberg, C. M., and Stanger, D. W., substituted dialuric and hydurilic acids, II, 25.
- Marble, A., Fernald, A. T., and Smith, R. M., effect of human diabetic plasma on blood-sugar curves in rabbits following insulin, III, 675.
- Graffin, A. L., and Smith, R. M., glycogen, fat, and water content of guinea-pig liver, III, 742.
- and Vartiainen, I., crystalline insulin, III, 209.
- Marble, B. B. See Brues, A. M.
- Marble, J. P., allanite from Barringer Hill, Llano Co., Texas, I, 334.
- Marceau, F., contractility of arteries in relation to circulation of the blood, III, 16. Arterial pulsation in vertebrates, III, 384.
- Marcelo, A. S. See Fronda, F. M.
- Marchand. See Piquet.
- Marchesani, O., brachydactyly and congenital globular lens, III, 397.
- Marcot, M. See Arcay, G.
- Marcou, I. See Daniélopou, D.
- Marcus, P. See Necheles, H.
- Marcy, L. F. See Forbes, E. B., and Kriss, M.
- Mardles, E. W. J., viscosity of suspensions and the Einstein equation, I, 357. Viscosity of suspensions in non-aqueous liquids, I, 439.
- Marduel, H., and Jullien, A., "polarisation" and cardiac rhythm in marine molluscs, III, 13.
- Marean, N. E. See Taylor, F. H. L.
- Marei, F., polymerides. IV. Determination of the constants of polymerisation, I, 120.
- Marenzi, A. D., and Banfi, R. F., determination of sulphur (as sulphates) in biological fluids, III, 84.
- and Lida, E., volume of red blood cell; influence of anticoagulant concentration, III, 284.
- Lida, E., and De Cairo, G., red cell volume. I. Effect of anticoagulants, III, 93.
- and Villalonga, F., Folin-Malmros method of blood-sugar determination: photometric application, III, 287.
- Maresh, C. See Willard, M. L.
- Maresh, M. M., paranasal sinuses from birth to late adolescence. I. Size of paranasal sinuses as observed in postero-anterior roentgenograms, III, 834.
- Margaria, R., efficiency in mountain climbing, III, 341. Utilisation of carbohydrate and its indispensability in muscular activity, III, 341. Effect of introduction of respiratory dead space on resistance to low air pressures, III, 712.
- and Foà, P., influence of muscular work on nitrogen exchange, creatine and acid excretion, III, 341.
- and Porri, G., metabolism of workers in rice fields, III, 55.
- Margaritov, V., rubber as a polyaggregate system, I, 440.
[with Serebriannikova, L.], kinetics of crystallisation of rubber gels, I, 440.
- Margen, S., and Schechtman, A. M., effect of localised increased temperatures on frog egg, III, 87.
- Margenau, H., van der Waals potential in helium, I, 59. Relativistic magnetic moment of a charged particle, I, 191.
and Wigner, E., magnetic moments of odd nuclei, I, 385.
- Margolick, M. See Koster, H.
- Margolis, G. See Smith, D. T.
- Margolis, H. M., and Eisenstein, V. W., treatment of arthritis, III, 761.
- Margolis, L. H. See Smith, D. T.
- Margolis, M. N. See Abramson, D. I.
- Mariani, B. See Scoz, G.
- Mariens, P. See Iitterbeek, A. van.
- Marine, D., and Rosen, S. H., effect of thyroid feeding on androgen excretion following testosterone injections in rabbits, III, 131. Increase in incidence of lymphomatosis in male fowls by castration, III, 854.
See also Rosen, S. H.
- Marini-Bettolo, G. B. See Bargellini, G.
- Marinin, V., and Zvetkov, V., dielectric constant of an anisotropic liquid in motion, I, 197.
- Marino, A. W. M. See Turell, R.
- Marion, L. See Manske, R. H. F.
- Marisc, M. M., heteropoly-acids as catalysts for vapour-phase partial oxidation of naphthalene, I, 416.
- Mark, H., intermicellar hole and tube system in fibre structure, I, 350.
and Breitenbach, J. W., thermal polymerisation of gaseous styrene, I, 221.
and Simha, R., viscosity and molecular structure, I, 289, 386. Degradation of long-chain molecules, II, 268.
- Mark, J., and Biskind, G. R., increased duration of insulin action by use of protamine-zinc-insulin in pellet form, III, 412.
See also Biskind, G. R., and Fine, J.
- Mark, M. F., protamine-zinc-insulin, III, 210.
See also Mosenthal, H. O.
- Markees, S., rôle of unsaturated fatty acids in keto-metabolism, III, 239. Alimentary ketogenesis and liver glycogen, III, 328.
- and Reich, I., effect of oral administration of fatty acids on blood-sugar, III, 596.
- Markel, J., chronic relapsing urticaria and angioneurotic oedema [treated with pancreatic extracts], III, 133.
- Marker, R. E., sterols. CV. Preparation of testosterone and related compounds from sarsapogenin and diosgenin, II, 376.
- and Hartman, C. G., assays of urine from rhesus monkeys for pregnadiol and other sterols, III, 580.
- Jones, E. M., and Krueger, J., sterols. CI. Structure of ψ -sarsapogenin, II, 373.
- Jones, E. M., and Turner, D. L., sterols. CII. Chlorogenin, II, 378.
- and Krueger, J., sterols. LXXXIV. Progesterone from hydoxycholeic acid. CVI. Sapogenins. XXXV. The supposed trillarigenin, II, 96, 378.

- Marker, R. E., Krueger, J., Adams, J. R., *jun.*, and Jones, E. M., sterols. XCI. Oxidation of 3:6-diacetoxycholestane, II, 175.
- and Rohrmann, E., sterols. LXX. Steroid content of mares' pregnancy urine. LXXV. Cholesterol derivatives. LXXVI. Oxidation and reduction products of equilenin. LXXIX. Oxidation products of dihydrosarsapogenin. LXXX. Reactions of chlorogenin. LXXXI. Conversion of sarsapogenin into pregnane-3(a):20(a)-diol. LXXXII. Estrane derivatives. LXXXIII. Oxidation products of sarsapogenin; C_{22} -lactone. LXXXV. Oxidation of sarsapogenin acetate with potassium permanganate. LXXXVII. Cholesterol and sitosterol derivatives. LXXXVIII. Pregnane-diols from sarsapogenin. LXXXIX. Reactions of ψ -sarsapogenin. XCII. Preparation of neotigogenin from sarsapogenin. XCV. Acid isomerisation of ψ -sapogenins to sapogenins. XCVI. *allo*-Pregnane-diols from tigogenin. XCVII. Sarsapogenin, II, 17, 84, 94, 95, 99, 100, 171, 179, 184, 218, 225; III, 32. Sterols from sow pregnancy urine, III, 658.
- Rohrmann, E., Crooks, H. M., Wittle, E. L., Jones, E. M., and Turner, D. L., sterols. XC. Oxidation products of sarsapogenin; pregnane-3:16:20-triol, II, 171.
- Rohrmann, E., and Jones, E. M., sterols. XCIII. *epi*- ψ -Sarsapogenin, ψ -sarsapogenone, and ψ -chlorogenin. XCVIII. Conversion of *isosarsapogenin* (smilagenin) into tigogenin, II, 184, 284.
- Rohrmann, E., Wittle, E. L., Crooks, H. M., and Jones, E. M., sterols. XCIV. Persulphate oxidation of *allo*-pregnane derivatives, II, 174.
- and Shabica, A. C., sterols. XCIX. Sterols from various sources, II, 372.
- Tsakamoto, T., and Turner, D. L., sterols. C. Diosgenin, II, 378.
- and Turner, D. L., sterols. CIII. Oxidation of pregnanetriols, II, 376.
- Wittle, E. L., Flambeck, L., *jun.*, Rohrmann, E., Krueger, J., and Ulshafer, P. R., sterols. LXXVII. Oxidation of pregnane-3:4:20(a)-triol and of coprostane-3:4-diol, II, 85.
- Wittle, E. L., and Tullar, B. F., sterols. LXXXVI. Deoxotestosterone and its conversion into testosterone, II, 94.
- Markevitch, I., and Cholodova, M., systems of four components. II. Stability of ferric hydroxide hydrosols, I, 410.
- Markham, A. E., compact gas saturator, I, 236.
- Markoff, N., myelogenic osteopathy, III, 6.
- Entogenous osteopathies, III, 218.
- Markoff, T., Takata reaction, III, 472.
- Markov, B. F. See Schtscherbakov, A. A.
- Markov, G. S., nutrition of tape worms in artificial media, III, 328.
- Markovitch, A. V., Novoselova, A. I., and Chaustova, M. M., fractionation of proteins by electrodialysis. III. Electrodialysis of antipneumococcus serum, III, 612.
- Markowska, (Mme.) D., rate of formation of *m*-nitroaniline hydrochloride, I, 122.
- Rate of formation of ammonium cinnamate, I, 224.
- Markowska, (Mme.) D., and Valensi, G., reactions of the type $A_{solid} + B_{gas} \rightarrow C_{solid}$ and the kinetics of the neutralisation of solid benzoic acid by gaseous ammonia, I, 122.
- Marks, H. P., and Young, F. G., hypophysis and pancreatic insulin, III, 577.
- Species variation in insulin content of pancreas, III, 898.
- See also Bliss, C. I., Fieller, E. C., and Strong, R. A.
- Marks, L., and Necheles, H., nutrition and nervous excitability, III, 913.
- Marks, M. B., hypersensitivity to sulphamide following Roentgen therapy, III, 678.
- Marks, G. See Hüttig, G. F.
- Markus, R. See Ruzicka, L.
- Markwood, L. N., turbidimetric determination of nicotine as phosphotungstate, II, 386.
- Quantitative characteristics of nicotine colour reaction with cyanogen bromide and β -naphthylamine, II, 386.
- Nornicotine as the predominating alkaloid in certain tobaccos, III, 945.
- Markwood, W. H., *jun.* See Benning, A. F.
- Marlow, H. W., [action of] ovarian extracts [on uterus], III, 212.
- and Richert, D., oestrogens of fowl, III, 655.
- Avian oestrogens and blood-calcium, III, 849.
- Marmorston, J. See Perla, D.
- Marmoy, F. B. See Lewis, A. H.
- Maroney, J. W. See Johnston, J. A.
- Marples, E. See Levine, S. Z.
- Marquardt, P., iodine reaction of glycogen and starch in presence of adrenaline, II, 338.
- Relationship between ascorbic acid and adrenaline, III, 306.
- Significance of oxidation of adrenaline to benzoquinone, III, 895.
- Marques, (Mme.) B. E. See Chamié, (Mlle.) C.
- Marquette, B., housing and health relationships re-examined, III, 683.
- Marquez, A. R., aliphatic arsinic acids. I. Arsenation of mono-, di-, and trichloroacetic and mono- and di-bromomalonic acids. II. Attempted preparation of di- and tri-arsinoacetic acids, II, 208, 338.
- Marquez, M. C., preparation of sulphamides, II, 274.
- Marquis, M. See Binet, L.
- Marquort, W., and Rietz, J., physiological studies on workmen in caissons, III, 389.
- Marrazzi, A. S., electrical studies on pharmacology of autonomic synapses. III. Action of ephedrine analysed by study of its sympathetic central and ganglionic effects, III, 153.
- Self-limiting mechanism in sympathetic homeostatic adjustment, III, 199.
- See also Sheehan, D.
- Marri, R., sodium veronal and adrenaline apnoea, III, 728.
- Effect of β -phenylisopropylamine on nasal mucosa, III, 759.
- Apnoea due to mechanical stimulation of central vagus in barbiturate-treated animals, III, 887.
- and Hauss, W. H., effects of various agencies on carotid sinus respiratory reflexes, III, 387.
- Influence of adrenaline on respiration, III, 409.
- See also Shen, T. C. R.
- Marriott, H. L., sulphapyridine and pneumococcal infections, III, 598.
- and Kekwick, A., rate and volume of blood transfusions in anaemia, III, 789.
- Marriott, J. A. See Hunter, L.
- Marron, T. U., and Moreland, F. B., surface tension and enzyme action, III, 685.
- Marshak, A., nature of chromosome division and duration of nuclear cycle, III, 555.
- Marshner, R. F. See Oblad, A. G.
- Marsden, A. See Maxted, E. B.
- Marsden, E. See Hodgson, H. H.
- Marsden, S. J. See Hammond, J. C.
- Marsh, A. E. L., flow meter for slow rates of flow, I, 302.
- Marsh, D., and Lazzell, C. L., 5:5-disubstituted hydantoins, II, 289.
- Marsh, F., bilirubin in urine, III, 744.
- Marsh, L. R. See Addlestone, J. A.
- Marsh, P. B., and Goddard, D. R., respiration and fermentation in carrot, *Daucus carota*. I. Respiration. II. Fermentation and the Pasteur effect, III, 459.
- Marshak, A., comparison of the sensitivity of mitotic and meiotic chromosomes of *Vicia faba* and its bearing on theories of crossing-over, III, 837.
- Marshak, R. E., heavy electron pair theory of nuclear forces, I, 342.
- and Bethe, H. A., electron-pair theory of heavy particle interaction and the Rabi effect, I, 342.
- Marshall, A. L. See Johnston, H. L.
- Marshall, C. E., zeolitic membrane electrodes, I, 119.
- Marshall, E. K., *jun.*, present status and problems of bacterial chemotherapy, III, 755.
- and Litchfield, J. T., *jun.*, pharmacology of sulphapyridine, III, 152.
- See also Bratton, A. C., and Litchfield, J. T., *jun.*
- Marshall, F. H. A., Verney, E. B., and Vogt, M., ovulation in rabbit and stimulation of the central nervous system by drugs, III, 212.
- Marshall, J. See DuBridge, L. A.
- Marshall, J. S., β -radiations of uranium- X_1 and uranium- X_2 , I, 139.
- Marshall, M. J., and Findlay, R. A., equilibrium pressures of oxygen adsorbed on active charcoal, I, 208.
- Marshall, M. S., Gunnison, J. B., and Luxen, M. P., test for sterility of biological products, III, 774.
- Marshall, S. See Chipman, J.
- Marshall, W. W. See Pierce, W. C.
- Marsland, D. A., and Rugh, R., resistance of sperm of *Rana pipiens* to hydrostatic compression; effect on embryonic development, III, 644.
- See also Pease, D. C.
- Marsovszky, P. von, *jun.*, pressor action of vasopressin [after adrenalectomy], III, 641.
- Mårtensson, J., citric acid metabolism in kidneys after administration of malic acid, III, 434.
- Martensen, E. W. See Pillemer, L.
- Martin, A. E. See Fox, J. J., and Groves, L. G.
- Martin, A. J. P., and Synge, R. L. M., volatile aldehydes liberated by periodic acid from protein hydrolysates, II, 385.
- See also Wooster, W. A.
- Martin, A. L., effects of magnesium and calcium on "white tip" of rice, III, 457.
- Martin, A. T. See Ellenberg, S. L.
- Martin, A. W. See Field, J., *jun.*
- Martin, C. P., movements of shoulder joint, with special reference to rupture of supraspinatus tendon, III, 621.

- Martin, D. W. See Smith, S. G.
- Martin, H., Drury, D. R., and Strouse, S., basal insulin requirement in diabetes, III, 898.
- Martin, Hans. See Kuhn, W.
- Martin, H. E., cancer of the head and neck in children, III, 46.
- Martin, H. F. See Welch, S. H.
- Martin, J. See Anson, B. J., and Keszytüs, L.
- Martin, J. E., jun. See McGee, L. C.
- Martin, J. F. See Farmer, E. H.
- Martin, L., autonomic imbalance and borderline states of thyrotoxicosis, III, 407. Basal metabolism in thyrotoxicosis, III, 805.
- Martin, L. C., optics of the electron microscope, I, 272. Development of the electron microscope, I, 376.
- Parnum, D. H., and Speak, G. S., development of the electron microscope, I, 272.
- Martin, P., neurological complications of pregnancy, III, 20.
- Martin, R. H. See Cook, J. W.
- Martin, S. J., and Herrlich, H. C., effect of endocrines on excretion of anti-diuretic substance, III, 406.
- Herrlich, H. C., and Fazekas, J. F., relation between electrolyte imbalance and excretion of antidiuretic substance in adrenalectomized cats, III, 210.
- Martin, S. T., thermionic and adsorptive properties of the surfaces of a tungsten single crystal, I, 1.
- Martin, T. See Padberg, L. R.
- Martin, W. F., and Mitchell, W., minor alkaloids of *Duboisia myopbroides*. III. Valeriodine, II, 360.
- Martinet, R. See Aubertin, E.
- Martini, V., and Cera, B., liberation of acetylcholine-like substances from vagus trunk, III, 714.
- and Sacchi, U., hypertension due to stimulation of central vagus and pituitary gland. II, III, 16.
- Martino, G., experimental epilepsy, III, 201. Mechanism of conditioned reflexes of genitals in dogs, III, 393.
- Martino, L., innervation of costal pleura, III, 177.
- Marton, L., new electron microscope, I, 394.
- Marton, S., fallibility of autopsive transfer test (Cowie), III, 691.
- Martos, E. See Maslow, L. A.
- Martschevski, A. T. See Tschinaeva, A. D.
- Martschuk, P. D., influence of exercise on body, III, 158.
- Martyn, R. See Kiss, P. von.
- Martz, H., renal calcification accompanying pyloric and high intestinal obstruction, III, 501.
- Maruta, K., biological effects of thyroidectomy in Graves' disease and thyrotoxicosis, III, 497.
- Maruyama, K., so-called electrolytic solution tension of the crystal surface of metals. I. Zinc, I, 28.
- See also Satō, M.
- Maruyama, M. See Ochiai, E.
- Maruyama, S., heterocyclic thioindigotin dyes. I. Synthesis of bis-(5:6-quinolinoxythiophen)indigotin, II, 196.
- Marvel, C. S., and Cowan, J. C., structure of vinyl polymerides. IV. Polymerides of methyl α -halogenoacrylates, II, 4.
- Dietz, F. C., and Copley, M. J., hydrogen bonds involving the C-H linking. X. Solubility of donor solutes in halogenated hydrocarbons, I, 438.
- Marvel, C. S., and Dunlap, L. H., acetylenic polysulphones. X. Vinyl chloride polysulphone, II, 3.
- and Himel, C. M., hexa-*p*-alkylphenyl-ethanes. X. *p*-cyclohexyl derivatives of hexaphenylthane, II, 302.
- and Levesque, C. L., structure of vinyl polymerides. V. Reactions of the polymerides of methyl vinyl ketone. VII. Polyacrylyl chloride, II, 4, 62.
- and Moon, N. S., structure of vinyl polymerides. VIII. Polystyrene and its derivatives, II, 73.
- Mozingo, R., and White, R., acetylenic cyclohexane derivatives, II, 300.
- Sample, J. H., and Roy, M. F., structure of vinyl polymerides. VI. Polyvinyl halides, II, 62.
- and Williams, W. W., acetyl polysulphones. XI. Compound, $C_{10}H_{16}O_8S$, from Δ^2 -pentinene polysulphone; other acetylene polysulphones. XII. Synthesis of 3:4- and 2:5-di-*n*-propyltetrahydrothiophen 1:1-dioxides, II, 3.
- See also Copley, M. J.
- Marvell, J. H., self-sealing valve, I, 302.
- Marvin, H. M., therapy of dropsy, III, 601.
- Marxer, A. See Ruzicka, L.
- Maryott, A. A., Hobbs, M. E., and Gross, P. M., electric moments of morpholine and halogenated toluenes, I, 430.
- Marza, V. D. See Guyon, L.
- Marzullo, E. R., acidosis in chronic glomerulonephritis, III, 666.
- Masamune, H., Suzuki, Masami, and Kondoh, Y., biochemistry of carbohydrates. LVI. Heparin, III, 911.
- Masayama, T., and Shuto, M., action of phosphatase in liver tumours, III, 671.
- and Yokoyama, T., nucleic acid [of liver tissue] in tumour production, III, 671.
- Mascarelli, L., and Pirona, M., diphenylmethane series, II, 170.
- Mascarenhas, C., and Usgâocar, S., abnormal canal in temporal bone, III, 834.
- Mascheroni, H. A., Muñoz, J. M., and Reussi, C., bone changes in endemic fluorosis, III, 603.
- Maschmann, E., bacterial proteases. XII. Dipeptidases of anaerobic bacteria (anaerodipeptidases). XIII. Absence from anaerodipeptidases of the carbonyl group necessary for the activity. XIV. Anaerobiase, III, 163, 534. Aminopoly-peptidase, III, 347.
- Masina, M. H. See Huggins, C.
- Masina, M. P., catalysed condensation reactions, II, 46.
- Masing, G., and Reinbach, R., law of linear crystal growth on the basis of observations on non-metallic materials; application to metals, I, 223.
- See also Horn, L., and Ruttevit, K.
- Masland, R. L., and Wigton, R. S., nerve activity accompanying fasciculation produced by prostigmine, III, 714.
- Maslov, V. P. See Andreev, K. K.
- Maslow, L. A., and Martos, E., changes in the prostate caused by high-frequency current, III, 33.
- Mason, C. M., Hickey, J. W., and Wilson, W. K., magnetic rotation of praseodymium, samarium, and europium chlorides in aqueous solution at 25°, I, 98.
- and Mellon, E. F., determination of transference numbers by e.m.f. methods, I, 119.
- Mason, H. C., normal and abnormal prothrombin levels, III, 706.
- and Smith, M. E., delayed prothrombin clotting time in avitaminosis-A and pellagra-like chicks, III, 10.
- Mason, H. H. See Goettsch, E.
- Mason, H. L., chemical nature of hormones of adrenal cortex, III, 807.
- See also Hoehn, W. M., Roepke, R. R., and Williams, R. D.
- Mason, I. C. See Chandler, F. B.
- Mason, J. H., Coles, J. D. W. A., and Alexander, R. A., cultivation of blue-tongue virus in fertile eggs produced on vitamin-deficient diet, III, 773.
- Mason, J. P., and Block, H. W., preparation and polymerisation of β -4-morpholinoethyl chloride, II, 315.
- and Malkiel, S., ethers and amines from β -4-morpholinoethyl chloride, II, 315.
- and Manning, J. F., solid derivatives of monoalkyl ethers of ethylene glycol and diethylene glycol, II, 296.
- and Terry, L. I., preparation of phenylacetone, II, 309.
- and Zief, M., 4-morpholinoethyl alkyl ethers and *N*-substituted morpholines, II, 315.
- Mason, J. T. See Grulee, C. G.
- Mason, K. F. See Bryan, W. L.
- Mason, L. W., and Gustavson, R. G., determination of oestrogenic substances in normal female urine through inception of pregnancy, III, 213.
- Mason, M. F., and Rozzell, J. D., attempts to demonstrate vasopressor properties in serum of hypertensive dogs, III, 102. Micro-determination of ammonia, III, 619.
- See also Barcroft, J.
- Mason, S. G., and Maass, O., viscosity in the critical region; ethylene, I, 290.
- Naldrett, S. N., and Maass, O., liquid and gaseous states of aggregation in the critical temperature region; ethane, I, 289.
- Mason, T. G. See Phillips, E.
- Mason, W. A., and Shutt, W. J., dielectric capacity of electrolytes in mixed solvents: ion association in solutions of magnesium sulphate, I, 290.
- Mason, W. P. See Holden, A. N.
- Mass, J. See Robinson, S. C.
- Massa, A. See Milone, M.
- Massart, L., and Dufait, R., fluoride inhibition and metal activation of yeast phosphatase, III, 348.
- and Vandendriessche, L., activation and inhibition of phosphatases, III, 767.
- Vandendriessche, L., and Dufait, R., autoxidation and enzymic oxidation of eseroline, III, 345. Inhibition by hydrogen peroxide of the aerobic oxidation of succinate, III, 532.
- See also Dufait, R.
- Massengale, J. T. See Morton, A. A.
- Masserman, J. H., effects of morphine sulphate on hypothalamus of cat, III, 111.
- See also Haertig, E. W.
- Masset, E. See Wenger, P.
- Massey, H. S. W., and Bates, D. R., continuous absorption of light by negative hydrogen ions, I, 275.
- See also Burhop, E. H. S., and Mohr, C. B. O.
- Massie, W. K. See Lever, W. F.
- Masson, G. See Dalton, A. J.
- Mast, S. O., and Pace, D. M., effects of calcium and magnesium on *Chilomonas paramecium*, III, 262.

- Master, A. M., Dack, S., and Jaffe, H. L., myocardial infarction, III, 98. Drug treatment of angina pectoris due to coronary artery disease, III, 191. Activities associated with onset of acute coronary occlusion, III, 383.
- Masterman, S. See Hughes, E. D.
- Masuda, G. See Ochiai, E.
- Masunaga, E. See Badger, L. F.
- Masur, W. See Necheles, H.
- Matavulj, P., effect of association on the refractive index of liquid mixtures; binary systems of quinoline with organic acids, I, 163. Refractive index of binary systems of amines and isobutyric acid, I, 163.
- and Heumann, J., effect of association on the refractive index of binary liquid mixtures of pyridine with organic acids, I, 163. Refractive index of liquid binary systems of amines with isovaleric acid, I, 163.
- Matchett, J. R., Levine, J., Benjamin, L., Robinson, B. B., and Pope, O. A., marihuana investigation. II. Effect of variety, maturity, fertiliser treatment, and sex on intensity of response to Beam's test, III, 926.
- Matenko, E. See Kulberg, L. M.
- Mather, K., outbreeding and separation of sexes, III, 465, 808.
- and North, S. B., umbrous: case of dominance modification in mice, III, 700.
- Matheron, R. See Chevallier, A.
- Mathew, T. V. See Rau, R. K.
- Mathews, T. J. See Osgood, E. E.
- Mathewson, C. H. See Collins, J. A.
- Mathias, M., occurrence of barite in an iron ore deposit in Namaqualand, I, 421.
- Mathieu, A., lithopadion developed from extrauterine gestation in intrauterine and extrauterine pregnancy, III, 126.
- Mathieu, J. P., Werner complexes; Raman spectra of tetra- and hexa-co-ordinated complexes. II. Ammines; general discussion, I, 146.
- and Cornevin, S., Werner complexes; Raman spectra of tetra- and hexa-co-ordinated complexes. I. Chlorides, cyanides, and nitrites, I, 57.
- Mathieu, M., and Stora, (Mlle.) C., X-ray study of esters of polymetatelluric acid, I, 62.
- Mathur, K. N. See Prasad, M.
- Mathur, P. B. See Singh, B. N.
- Matiegka, J., skeletal trunk indices, III, 700.
- Matlack, M. B., and Tucker, I. W., esterase from muscle tissue, III, 346.
- Maton, J. See Hubert, B.
- Matras, A., hæmatology and skin diseases, III, 181.
- Matschinskaja, I. V. See Schorigin, P. P.
- Matson, C. A. blood groups and aguesia in Indians of Northern Alberta, III, 876.
- Matsui, A., and Yasuda, Motomu, production of formaldehyde by direct oxidation of methane, II, 336.
- See also Ogawa, T.
- Matsukawa, D., colorimetric micro-determination of formaldehyde, II, 294. Micro-determination of formaldehyde with dimedon; fate of formaldehyde during process of toxoid formation of diphtheria toxin, III, 770.
- See also Numata, I.
- Matsumoto, H., toxicity and effect of diethylaminoethylephedrine (isalon) on respiration, bronchial muscles, and bronchial spasm, as compared with ephedrine, III, 249.
- Matsumoto, T., and Iwai, S., silver organosols. I. Preparation by the reaction between chlorinated oils and silver oxide. II. Particle size and stability, I, 293. Chlorinated oils, II, 203.
- See also Saegusa, H.
- Matsumura, S., Tarama, K., and Kodama, S., synthesis of paraffins. I. Activated adsorption of hydrogen, carbon monoxide, carbon dioxide, and water on cobalt. II. On iron, I, 438.
- Mattauch, J., isotopic weight of ^{12}C , I, 337.
- See also Hahn, O.
- Mattei, G. See Beati, E.
- Matthes, I., behaviour of cosmic rays on passage through very thick layers of lead, I, 91.
- See also Kolhörster, W.
- Matthes, K., Gross, F., and Göpfert, H., peripheral circulation in man, III, 884.
- and Schleicher, I., determination of circulation time in man, III, 15.
- See also Gross, F.
- Matthew, G. D. See Arnott, W. M.
- Matthews, C. A. See Swett, W. W.
- Matthews, E. See Wintrobe, M. M.
- Matthews, E. D., Reneger, C. A., and Thomas, R. P., causes of brown root rot of tobacco, III, 74.
- Matthews, J. E., jun., Dow, R. B., and Anderson, A. K., effects of high pressure on activity of pepsin and rennin, III, 932.
- Matthews, M. W., Magath, T. B., and Berkson, J., Exton-Rose glucose tolerance test, III, 238.
- Matthews, N. L., Curtis, G. M., and Meyer, J. H., effect of increased iodine feeding on iodine content of cows' milk, III, 143.
- Matthews, R. A. See Kell, R. C.
- Mathez, R., heterochromosome problem in Saurapsida. I. Birds, III, 280.
- Mattice, M. R., Baxt, H., and Byrne, J. M., effect of thiosulphate on arsenic excretion, III, 927.
- See also Bridges, M. A.
- Mattill, H. A. See Deatherage, F. E., Golumbic, C., and Harris, R. L.
- Mattis, R. D. See Terry, T. L.
- Matuda, S. See Hirone, T.
- Matsumiya, S. See Sumi, M.
- Matusehak, M. C. See Cox, G. J.
- Matusita, T., relation of arteriosclerosis to function of gonads, III, 885.
- Matzner, M. J. See Windwer, C.
- Matznevitsch, I. K., composition of cotton plant latex, III, 618.
- Maucherat, (Mlle.) M., saturated vapour pressure of lithium between 462° and 642° , I, 17.
- Maughan, G. B. See Waugh, T. R.
- Mauldin, W. L. See Russell, A.
- Maume, L. See Lagatu, H.
- Maun, M. E., experimental coronary occlusion and myocardial fibrosis, III, 708.
- Manrer, F. W., Warren, M. F., and Drinker, C. K., composition of mammalian pericardial and peritoneal fluids; passage of foreign proteins from the blood stream into these fluids, III, 886.
- Maurer, K., Meier, K., and Reiff, G., constituents of the herb *Gratiola officinalis*. I, II, 99.
- Maurer, R. J., photo-electric and optical properties of sodium and barium, I, 276.
- Mauriac, P., Servantie, L., and Baron, A., test of induced hyperlipæmia in diabetes, III, 434.
- Maurice, C. S., pegmatites of the Spruce Pine district, N. Carolina, I, 303.
- Mautz, F. R., mechanical respirator as adjunct to closed system anaesthesia, III, 252.
- See also Gregg, D. E., Muntwyler, E., and Thornton, J. J.
- Maver, M. E., separation of cathepsin from malignant and normal rat tissue, III, 163.
- and Voegtlin, C., protein synthesis in fibrin-papain-glutathione digests, III, 686.
- Mavity, J. M. See Grosse, A. V.
- Mavros, A., and Brentano, C., absence of adrenaline lactacidæmia during glycogen breakdown, III, 408.
- Maxfield, F. A., characteristics of the glow-arc transition in mercury vapour, I, 183.
- Maxia, C., effect of ultra-violet rays on Liesegang rings, I, 72. Statistical control of biological applications of mitogenetic rays, III, 69.
- Maxim, M., and Bors, G., vitamin content of indigenous [Roumanian] oils, III, 592.
- Maximova, Z. P. See Gelman, A.
- Maxted, E. B., and Evans, H. C., relative effect of inhibitors on adsorption and on catalytic activity. II, I, 32.
- and Marsden, A., catalytic toxicity and chemical structure. VI. Poisoning of platinum catalysts by metals, I, 262.
- and Morrish, R. W. D., catalytic toxicity and chemical structure. V. Simple anions containing toxic elements, I, 225.
- Maxted, G. R., incidence of blood groups in rheumatic heart disease, III, 838.
- Maxted, W. E. See Fuller, A. T.
- Maxted, W. R. See Colebrook, L.
- Maxwell, H. N., and Green, J. B., Zeeman effect of gold, I, 335.
- Maxwell, L. R., and Mosley, V. M., inter-nuclear distances in Se_2 , Te_2 , and HgCl by electron diffraction, I, 101. Molecular structure of nitrogen dioxide and nitric acid by electron diffraction, I, 432.
- May, A. N. See Powell, C. F.
- May, C. D., Blackfan, K. D., McCreary, J. F., and Allen, F. H., jun., clinical studies of vitamin-A in infants and children, III, 817.
- May, E., and Mozziconacci, P., lunar-facies, III, 371.
- May, E. L. See Weinstock, H. H., jun.
- May, K. R., apparatus for coating surfaces with magnesium oxide, I, 421.
- May, P. L. See Nasini, A. G.
- Maycock, R. L. See Buswell, A. M.
- Maycock, W. D. A. See Brown, G. L.
- Mayeda, S., Fujii, K., Abi, H., and Tsurumi, M., feeding experiments with decomposition products of proteins. XV. Blood picture and resistance against infection in mice so fed, III, 817.
- Mayeda, Y., and Suzuki, T., brachial plexus of elephant, III, 551.
- Mayendorf, N. von, anatomical basis of apraxia and aphasia, III, 200.
- Mayer, A. See Chevillard, L.
- Mayer, H. See Lang, O. S. A. K.
- Mayer, J. E., and Streeter, S. F., phase transitions, I, 17.
- See also Mitchell, J. J., and Streeter, S. F.
- Mayer, J. J. See Blumstein, A.
- Mayer, Karl. See Waldschmidt-Leitz, E.
- Mayer, Kurt. See Schenck, R.
- Mayer, L. L., optic pathway, III, 491.
- See also Weil, A.
- Mayer, M. See Heidelberger, M.

- Mayer, V. See Flood, J. M.
- Mayer, W. D., and Lightbody, J. J., use of food in treatment of bleeding peptic ulcer (Meulengracht diet), III, 36.
- Mayerhöfer, J. See Guth, E.
- Mayers, M. R. See Greenburg, L.
- Mayerson, H. S., and Bench, G. E., relationship of tissue (subcutaneous and intramuscular) and venous pressures to syncope induced in man by gravity, III, 385.
- Mayfield, C. R., and Gober, M., comparative efficiency of Endo, lithium chloride Endo, deoxycholate-citrate, and bismuth sulphite media for the isolation of *Eberthella typhosa*, III, 455.
- Mayfield, F. D. See Schoch, E. P.
- Mayfield, H. L. See Richardson, J. E.
- Maynard, J. E., modes of quartz-bearing plutonites from Derby, Vermont, I, 85.
- Maynard, J. L., Barber, H. H., and Sneed, M. C., qualitative procedure for the analysis of group II, I, 174.
- Maynard, L. A. See McCay, C. M., Voris, L., and Zimmerman, W. I.
- Maynard, M. T., vitamin-D in treatment of acne and of diseases due to altered usage of calcium, III, 674.
- Mayneord, W. V., total energy absorption in biological objects, III, 763.
- Mayo, C. W., value of high concentrations of oxygen in surgery, III, 794.
- and Miller, J. M., solution of sulphanilamide in local treatment of wounds, III, 921.
- See also Boothby, W. M., McDonald, J. R., and Wakefield, E. G.
- Mayo, F. R. See Kharasch, M. S., and Walling, C.
- Mayo, H. M., and Finlayson, C., leucopenia and mucosal lesions after sulphapyridine, III, 862.
- Mayo, R. L., and Robinson, H. R., Auger and secondary X-ray electrons from gold, I, 50.
- Mayor, Y., applications of selenium dioxide to the oxidation of organic compounds, II, 113.
- Mazé, P., and Mazé, P. J., jun., mineral nutrition of higher plants, III, 270.
- Absorption of sucrose solutions by the roots of *Zea mays*, III, 270.
- Mazé, P. J., jun. See Mazé, P.
- Maze, R. See Auger, P.
- Mazer, C. See Mazer, M.
- Mazer, M., and Mazer, C., effects of testosterone propionate on ovariectomised mature rat, III, 645.
- Mazia, D., and Jaeger, L., nuclease and protease action and histochemical tests on salivary chromosomes of *Drosophila*, III, 180.
- Mazille, M., dissociation of sero-anaphylactic and anti-body properties, III, 359.
- See also Doladilhe, M.
- Mazkevitch, P. P. See Minina, E. G.
- Mazumdar, D. C. See Chopra, R. N.
- Mazur, J., specific heat of ethyl ether, nitrobenzene, and carbon disulphide, I, 16.
- Mazza, F. P., and Lenti, C., brain glycolysis, III, 201.
- and Malaguzzi-Valeri, C., action of pancreas lipase on monoacylglycerides, III, 71.
- and Tappi, G., X-ray study of leuco- and xantho-pterin, III, 226.
- Mazza, L., fluorescence of cerium salts in solution, I, 174.
- Filter for transmission of medium ultra-violet rays and its application, I, 175.
- Direct determination of elements from their flame spectra by the photo-electric method, I, 232.
- and Iandelli, A. [with Botti, E.], oxyhalides of the rare earths and their reflexion spectra; oxychlorides of the cerides, I, 192.
- Mazzaracchio, V., preservation of bacteria by drying, III, 451.
- Mazzocco, P., seasonal variations in weight and chemical composition of ovary and testes of *Bufo arenarum*, III, 657.
- See also Bogetti, H., and Deulofeu, V.
- Mazzone, G. B. See Cottini, G. B.
- Mchitarian, V. G., catalytic action of toluene-*p*-sulphonic acid in the reaction of acetals with pentaerythritol, II, 151.
- Mead, D. J., and Fuoss, R. M., dependence of conductance on field strength, I, 118.
- Dependence of conductance on field strength. II. Tetrabutylammonium bromide in diphenyl ether at 50°, I, 361.
- Fuoss, R. M., and Kraus, C. A., properties of electrolytic solutions. XXI. Conductance of tributylammonium picrate in ethylene chloride at 25°, I, 118.
- See also McIntosh, R. L.
- Mead, J. F. See English, J., jun.
- Mead, T. H., occurrence of free vitamin-A alcohol in fish livers, III, 50.
- Meade, E. M., new colour reaction for diarylamines, II, 11.
- Meador, R. G., time and place of experimental myelin degeneration in optic pathways, III, 21.
- Meador, R. P. See Brown, C. L.
- Meakin, R. See Bates, L. F.
- Meakins, J. C., hypoglycaemia following encephalitis, III, 721.
- Meakins, R. J. See Jones, E. R. H.
- Meals, R. N. See Gilman, H.
- Meamber, D. L., Fraenkel-Conrat, H. L., Simpson, M. E., and Evans, H. M., preparation of pituitary growth hormone free from lactogenic and thyrotropic hormones, III, 121.
- See also Fraenkel-Conrat, H. L.
- Means, J. H. See Hertz, S.
- Mebane, G. See Holman, R. L.
- Mecchi, E. See Almquist, H. J.
- Mecke, R. See Rumpf, K.
- Medawar, J., lymphocytes in tissue culture, III, 339.
- Medes, G., and Stavers, E., photometric determination of inorganic sulphate in biological fluids, III, 620.
- Medinski, C. B. See Naumov, S. N.
- Medox, G. V., and Dobrovolskaja, N. K., new alkaline fusion procedure; 3-chloro-4-hydroxy-5-sulphobenzoic acid and its conversion into 3:4-dihydroxy-5-sulphobenzoic acid, II, 278.
- Medvedev, S., and Podjapolskaja, A., oxidation of tetrahydronaphthalene in condensed phase, I, 259.
- Tschilikina, E., and Klimenkov, V., polymerisation of chloroprene. I. Influence of tetralin hydrogen peroxide on the kinetics of the polymerisation of chloroprene in the condensed phase, I, 221.
- See also Abkin, A.
- Medvedeva, N. B., defence enzymes acting on proteins of endocrine secretions in serum of old rabbits, III, 94.
- Heat conduction of integument in rat, III, 139.
- Senile modifications of nitrogenous and protein substances in tissues and influence of cytotoxic antireticular serum on these variations, III, 237.
- Connective tissue, excretory organs, and water exchange in molluscs, III, 814.
- Action of cytotoxic sera on protein and nitrogen content of tissues, III, 816.
- Formation of protective serum enzymes following injection of proteins, III, 881.
- See also Gragerova, R. B.
- Meehan, E. J., and Nutting, G. C., line absorption spectra of rare earth ions in crystals, I, 7.
- Meek, J. M., theory of spark discharge, I, 276.
- Meek, W. J., effects of general anaesthetics and sympathomimetic amines on cardiac automaticity, III, 792.
- Meen, V. B., Santa Luzia de Goyaz meteorite, I, 84.
- Meerovitch, Z. A. See Petrov, A. D.
- Meerson, T. I., effect of inactivated sera on lipolytic enzymes, III, 685.
- Meersseman, F., chondriome of liver cell in normal guinea-pig, III, 180.
- Meerwein, F., multiple sclerosis of endocrine glands (Falta), III, 401.
- Meerwein, H., pinacolin rearrangement of 1:2-dimethyl-cyclohexane- and -cyclopentane-1:2-diols, II, 43.
- Battenberg, E., Gold, H., Pfeil, E., and Willang, G., tertiary oxonium salts. II, II, 114.
- Hofmann, P., and Schill, F., migration and elimination of halogen from aromatic halogeno-compounds under the influence of catalysts, II, 167.
- Mees, G., influence of retrobulbar anaesthesia on intraocular pressure, III, 489.
- Meesman, A., and Wilke, F., clinical and anatomical investigations on a previously unknown dominant hereditary dystrophy of the cornea, III, 396.
- Meewes, K. H., enzymic investigation with technically injurious micro-organisms, III, 351.
- Meggers, W. F., first spectrum of tin, I, 241.
- Spectroscopic suggestions, I, 330.
- and Moore, (Miss) C. E., description and analysis of the second spectrum of vanadium (V^{II}), I, 423.
- See also Humphreys, C. J.
- Megibow, R. S., Friedberg, L., Rodbard, S., and Katz, L. N., changes in arterial pressure after bilateral complete or partial ureteral occlusion, III, 566.
- Megson, N. J. L. See Hartshorn, L.
- Megy, F. R. See Capizzano, N.
- Mehendale, V. L. See Karvé, D.
- Mehl, J. W., Oncley, J. L., and Simha, R., viscosity and the shape of protein molecules, I, 436.
- See also Edsall, J. T.
- Mehl, R. See Bezsonoff, N.
- Mehlig, J. P., and Johnson, K. R., test for magnesium with *p*-nitrobenzenazoresorcinol; effect of diverse ions, I, 174.
- Mehlman, J., tonic neck reflex in newborn infants, III, 798.
- Mehra, R. K., and Pandya, K. C., condensation of aldehydes with amides. IV. *m*-Hydroxybenzaldehyde. VI. Condensation of *o*-, *m*-, and *p*-methoxybenzaldehydes, II, 44.

- Mehta, D. R., and Ayyar, P. R., steric effect of the nitro-group on the orientation of a third substituent in *m*-nitrophenol, II, 126.
- Mehta, M. L. See Singh, B. N.
- Mehta, S. M., and Kabadi, M. B., pH of solutions containing zinc hydroxide and sodium hydroxide, I, 73.
- Meier, A. E., association of harmotome and barium felspar at Glen Riddle, Pennsylvania, I, 84.
- Meier, K., toxicology of amygdalic acid, III, 527.
- See also Gordonoff, T., and Maurer, K.
- Meier, L., determination of the redox potential of blood *in vitro*; effect of administration of reducing substances, III, 286.
- Meier, R., Allemann, O., and Merz, E., experiments with sulphonamidothiazole (Ciba 3714), III, 920.
- and Müller, R., vascular action of a new iminazole derivative, III, 250. Carbon dioxide test of sensitivity of respiratory centre, III, 887.
- Meijer, T. M., constituents of derris root, III, II, 101.
- Meiklejohn, A. P. See Kark, R.
- Meiklejohn, J., light-sensitive strain of *Pseudomonas aeruginosa*, III, 166.
- Meili, C., and Stoker, F., medical treatment of arterial hypertension, III, 103.
- Meinicke, E., and Fischer, R., Meinicke clearing reaction with dried blood, III, 94.
- Meininger, W. M., and Barnett, C. W., treatment of syphilis by sobisminol mass, III, 336.
- Meisel, K. See Heimbrecht, M., and Strotzer, E. F.
- Meissenheimer, H. See Freudenberg, K.
- Meissner, G. See Meissner, W.
- Meissner, H. P., and Schumacher, H. J., reaction of alkyl halides with hydrogen halides and decomposition of methyl bromide, II, 147. Chlorine-induced decomposition of diethyl ether [and of acetaldehyde], II, 150.
- Meissner, W., and Meissner, G., gas kinetic processes in an expansion cylinder, I, 105.
- Meister, H. See Ruzicka, L.
- Meister, H. J. See Wurm, K.
- Meister, R. See Rieche, A.
- Meister, W., and Kowalzig, G., constitutional types and circulatory systems of professional wrestlers, III, 340.
- Meites, J. See Bergman, A. J.
- Meitner, L., capture cross-sections for thermal neutrons in thorium, lead, and uranium 238, I, 187.
- Meixner, J., thermodynamic and kinetic treatment of the thermo-electric effects in magnetic field, I, 103. Effect of reversal of magnetic field on the galvanomagnetic and thermomagnetic effects, I, 104. Thermodynamics of the thermo-mechanical effect of helium II, I, 154.
- Méjean, P. See Gay, L.
- Melampy, R. M., and Jones, D. B., chemical composition and vitamin content of royal jelly, III, 51.
- and Stanley, A. J., alleged gonadotropic effect of royal jelly, III, 900.
- Meldahl, H. F. See Ruzicka, L.
- Meldrum, F. R., thermal decomposition of nitrogen iodide, I, 224. Heat of formation of nitrogen iodide, I, 224.
- Meleney, H. E. See Frye, W. W.
- Melenteev, B. N. See Gileva, Z. M., and Volkova, M. I.
- Melenteev, P. V. See Todes, O. M.
- Melick, J. M., successful termination of pregnancy following bilateral sympathectomy, III, 127.
- Mellanby, (Sir) E. See Harrison, D. C.
- Mellanby, H., dental hypoplasia and caries in Finnish Lapps, III, 876.
- Mellanby, J., and Pratt, C. L. G., reactions of urinary bladder of the cat under conditions of constant pressure, III, 41. Calcium and blood coagulation, III, 93. Reactions of urinary bladder of cat under conditions of constant volume, III, 138. Negative phase blood produced *in vivo* by trypsin, III, 378.
- Mellanby, K., temperature coefficients and acclimatisation, III, 852.
- Melland, A. M., relation of nucleolus to secondary constrictions, III, 555.
- Mellinger, W. J., petrous apex of temporal bone and its relations, III, 27.
- Mellish, C. H., Baer, A. J., and Macias, A. C., biological properties of stilbæstrol and stilbæstryl dipropionate, III, 656.
- Mellon, E. F. See Iddles, H. A., and Mason, C. M.
- Mellon, M. G., spectrophotometry in analytical chemical research, I, 329.
- See also Howe, D. E.
- Mellon, R. R., Locke, A. P., and Shinn, L. E., anti-enzymic nature of bacteriostatic action of sulphanilamide, III, 755.
- and McKinney, R. A., biological nature of bacteriostatic effect of sulphydryl-ine against the pneumococcus, III, 436.
- See also Locke, A., Main, E. R., and Shinn, L. E.
- Mellor, D. P., and Goldacre, R. J., magnetic studies of co-ordination compounds. I. Cobaltous compounds, with special reference to their resolvability, I, 388.
- and Lockwood, W. H., magnetic study of effect of bond angle distortion, I, 352.
- Mellors, R. C. See Muntwyler, E.
- Melmore, S. S., symmetrical arrangement of equal spheres, I, 387.
- Melnick, D., and Field, H., jun., determination of nicotinic acid in biological materials by means of photo-electric colorimetry, III, 779. Determination of nicotinic acid: inhibitory effect of cyanogen bromide on the aniline side reactions, III, 819.
- Field, H., jun., and Parnall, C. G., albumin-globulin ratio of serum, III, 839.
- Field, H., jun., and Robinson, W. D., urinary excretion of thiamin by normal individuals, III, 428.
- See also Robinson, W. D.
- Melnick, J. L., ultra-violet absorption spectra of cocarboxylase, thiamin, and their reduction products, III, 160.
- and Stern, K. G., carboxylase, III, 532.
- See also Stern, K. G.
- Melnikov, N. N., and Rokitzkaja, M. S., oxidation of organic compounds with selenium dioxide. VI. Oxidation of ketones in alcoholic solutions, II, 154.
- Skliarenko, S. I., and Tscherkasova, E. M., electrochemical method of introducing the thiocyno-radical into organic compounds, II, 169.
- Meloehe, V. W. See Hiskey, C. F., Knudson, H. W., and Ruseh, H. P.
- Melten, H., reproduction in dogfish, III, 834.
- Meltsner, M., Greenfield, D., and Rosenzweig, H., alkanolamines. VIII. Reaction of ethanalamines with *p*-nitrobenzoic acid, II, 220.
- Melville, D. B. See Carter, H. E., Du Vigneaud, V., and György, P.
- Melville, H. W., Jones, T. T., and Tuckett, R. F., mechanism of polymerisation of vinyl acetate and methyl vinyl ketone, I, 263.
- See also Birse, E. A. B., and Jones, T. T.
- Melzer, L. See Joki, E.
- Memmesheimer, A., formation of pigment in human skin, III, 420.
- See also Way, S. C.
- Menaché, R. See Makris, C. G.
- Mende, H. See Hertz, G.
- Mendel, B., Mundell, D., and Strelltz, F., choline-esterase and electrolytes, III, 162.
- Mendel, H., and Coops, J., gradual decomposition by oxidation of fatty acids into their next lower homologues, II, 65.
- Mendeléeff, P., diagnostic reaction of cancer, III, 425.
- Mendelsohn, H. V., fixed eruption with extraneous manifestation due to mapharsen, III, 526.
- Mendenhall, W. C., occurrence of a deposit of trona, I, 179.
- Mendenhall, W. L., and Shreeve, K. E., effect of sulphanilamide on isolated frog heart, III, 247.
- Méndez, R., action of helium on polonium under the influence of the electric discharge, I, 78.
- Mendikian, A. H., diffusion of creolin in water, I, 106.
- Mendive, J. R., occurrence of α -amyrin and ursolic acid in leaves of *Ilex paraguariensis*, III, 695.
- Mendlowitz, M., and Leslie, A., cyanosis produced by anastomosis of pulmonary artery to left auricle, III, 841.
- Mendoza, R. See Janot, M. M.
- Meneely, G. R. See Kaltreider, N. L.
- Meneghetti, E., pharmacological organotropism. II, III, 67.
- Meneghini, T., histogenesis of islets of Langerhans, III, 372. Combined effect of ergobasine [ergometrine] and a posterior pituitary factor (orasthin) on uterine muscle, III, 406.
- Menendez, B. See Sagastume, C. A.
- Meng, C. W., rôle of choline-esterase in sensitisation of muscle to acetylcholine, III, 635.
- See also Lee, L. Y.
- Menke, W., conditions of carotenoids in plastids, III, 549. Lamellar structure of chloroplasts in ultra-violet light, III, 778.
- Menkin, V., leucocytosis-promoting factor in inflammatory exudates, III, 7. Mechanism of leucocytosis with inflammation, III, 556, 790. Nature of leucocytosis-promoting factor of inflammatory exudates, III, 704. Effect of leucotaxine on cellular permeability and on cleavage development, III, 840.
- Menshikov, G. P., alkaloids of *Heliotropium lasiocarpum*; structure of heliotropic acid, II, 152.
- Menzel, D. H. See Aller, L. H., and Baker, J. G.
- Menzel, W., and De Decker, J. F., Laurence-Moon-Biedl syndrome, III, 301.

- Menzer, G., cause of spot abundance in electron photographs of etched crystals, I, 101.
- Menzies, A. W. C. See Eddy, R. D.
- Menzies, E. C., treatment of schizophrenia by hypoglycæmia, III, 486.
- Mer, C. L., factors determining resistance to movement of water in leaves, III, 939.
- Meranze, D. R. See Aronson, J. D.
- Merchant, F. T. See Waugh, T. R.
- Mercier, F., and Macary, S., biological assay of glucosides of *Adonis vernalis* on guinea-pigs, III, 333.
- Merckel, C., and Nelson, W. O., relation of oestrogenic hormone to formation and maintenance of corpora lutea in mature and immature rats, III, 736.
- Meredith, J. M. See Crutchfield, W. G.
- Mereshinski, M., Tscherkasova, L., and Sasanski, J., variations in blood gases produced by injection of insulin in schizophrenia. I and II, III, 112.
- Merhaut, O., resonance penetration of α -particles in the aluminium nucleus by a photographic method, I, 277.
- Mericola, F. C. See Booth, H. S.
- Merikas, G. E., relationship between pernicious and achylic hypochromic anæmia, III, 6.
- Merikoski, H. See Enkvist, T.
- Merker, E., effect of electrolyte content of surrounding water on water animals, III, 258. Influence of electrolyte on the fauna of fresh water, III, 505.
- Merker, H. See Irvin, J. L.
- Merlis, J. K., and Lawson, H., effect of eserine on spinal reflexes in dog, III, 198.
- Merlo, P., and Fiaschi, E., metabolism in pituitary tumours, III, 121.
- Merrit, W. H. See Freiman, D. G.
- Merson, J. M. See Bashulin, P. A.
- Merten, R., action of anterior pituitary ultrafiltrates on carbohydrate and protein metabolism, III, 405.
See also Albers, D., and Hinsberg, K.
- Mertie, J. B., jun., placer gold in Alaska, I, 334.
- Merton, H., reproduction in albino mouse. II. Maturation of the sperm cells. III. Duration of life of spermatozoa in female reproductive tract, III, 131.
- Mertz, B. See Laubender, W.
- Mertz, E. T., and Owen, C. A., iminazole [glyoxaline] buffer: its use in blood-clotting studies, III, 470.
- Seegers, W. H., and Smith, H. P., inactivation of prothrombin by purified thrombin solutions, III, 10. Prothrombin, thromboplastin, and thrombin: quantitative relationships, III, 284.
- Mertzlin, R. V. See Trifonov, N. A.
- Merwe, C. W. van der. See Bacon, R. H.
- Merz, E. See Meier, R.
- Merz, K. W., and Bergner, K. G., pharmacologically valuable components of Indian hemp. I. II. "Cannabinum tannicum" and modified determination of tannin, II, 285; III, 760.
- Meschtscherjakov, M. G. See Alchasov, D. G.
- Meservey, A. B. See Pierce, H. B.
- Mesirow, S. See Necheles, H.
- Meškan, F. See Bureš, E.
- Mesnard, J., and Toumanoff, C., infective agent of rickettsia type in a tick (*Hemaphysalis bispinosa*, Neumann) from Cochinchina deer, III, 544.
- Mesrobian, L., cytology of the peritoneal exudate produced by injection of the virus of inguinal lymphogranulomatosis in the monkey, III, 267.
- Messerli, P. M., vitamin-C deficiencies in the population of Lausanne, III, 235.
- Messerly, G. H., and Aston, J. G., heat capacity and entropy, heats of fusion and vaporisation, and vapour pressure of methyl chloride, I, 248.
- Aston, J. G., and Kennedy, R. M., isomerisation equilibrium of *n*-butane and isobutane and the third law of thermodynamics, I, 352.
See also Aston, J. G.
- Messinger, E., and Moros, N., cardiovascular effects of large doses of metrazol as employed in treatment of schizophrenia, III, 760.
- Messinger, W. J., and Hawkins, W. B., arsphenamine liver injury modified by diet, III, 336.
- Metalnikov, S., and Yakimach, A., effect of radioactive radiation on multiplication and structure of micro-organisms, III, 269.
- Metcalfe, R. G., and Hawkins, W. B., plasma-protein, bile salt, and cholesterol metabolism as influenced by multiple injections of gum acacia in bile fistula dogs, III, 136.
- Metcalfe, R. P. See Freed, S.
- Metcalfe, W. See Shumacker, H. B.
- Metcalfe, W. V., kinetic explanation of osmotic pressure, I, 354.
- Metcalfe, G., watermark disease of willows. I. Host-parasite relationships, III, 872.
- Metfessel, M. See Baldwin, F. M.
- Metropolis, N. See Beutler, H.
- Mettenleiter, M. W., interferometric serum test for cancer, III, 509.
- Mettier, S. R. See Borson, H. J.
- Mettler, F. A., Robinow, M., Brown, W. R., and Burpee, C. M., blood-cerebrospinal fluid barrier of normal children as determined by bromide permeability quotient, III, 113.
See also Smith, C. G.
- Metz, C. W., and Bozeron, M. L., mechanism of induced chromosome rearrangement in *Sciara*, III, 555.
- Metz, E., action of *l*- and *d*-veritol in man, III, 525.
- Metz, M. H., Lackey, R. W., Wigby, P. E., Small, A. B., and Patterson, C. O., peptic ulcer treated by posterior pituitary preparations, III, 500.
- Metzger, F. See Gebhardt, H.
- Metzger, H. J., Beaudette, F. R., and Stokes, F. R., use of incubating egg as a differential medium, III, 79.
- Metzger, H. N., and Ostrum, H., right-sided aortic arch, III, 371.
- Metzger, N. See Baumann, E. J.
- Meulengracht, E., historical aspects of hæmatology; ætiological factors in pernicious anæmia, III, 276.
- Meuli, L. J. See Shirley, H. L.
- Meunier, P., Hinglais, H., Bovet, D., and Dreyfuss, A., antihæmorrhagic action of 2-methyl-1,4-naphthoquinone in the rabbit; possibility of *K*-hypervitaminosis, III, 559.
- and Raoul, Y., calculation of the vitamin requirements of animals, III, 592.
See also Vermes, M.
- Meurer, H. See Herzog, F., and Osterwald, K. H.
- Meurice, R., and Devuyt, A., use of the photo-electric cell in acidimetry, I, 230.
- Meyenburg, H. von, "insulinitis," in diabetes mellitus, III, 898.
- Meyer, A., histology of epilepsy [following cardiazol], III, 22. Histology of pituitary of normal and partly hypophysectomised *Triton vulgaris*, III, 493.
- Meyer, A. E., modification of agar cup method of determining fungistatic action of powders and ointments, III, 862.
- Meyer, A. R., influence of diet on resistance to diphtherial toxin, III, 47. Influence of diet on intoxication with phenol and cyanide, III, 47.
- Meyer, B. See Schiff, L.
- Meyer, B. S., daily cycle of apparent photosynthesis in a submerged aquatic, III, 459.
- Meyer, C. E., and Smith, A. H., effect of type of carbohydrate ingested on citric acid production, III, 754.
See also Kuether, C. A., and Smith, A. H.
- Meyer, E., Müller, F., and Zuber, K., detection of ultra-violet solar radiation at 2150 Å., I, 184.
- Meyer, Esther, and Arnold, L., efficiency of several germicides and antiseptics on the oral mucosa, III, 61.
- Meyer, F., stroke volume of heart and cardiac weakness, III, 793.
and Spiegelhoff, W., action of sympathomimetic substances on heart and blood-vessels in man, III, 600.
- Meyer, Fred. See Hall, N. F.
- Meyer, F. A., diurnal blood-sugar curve in the fasting subject, after ingestion of fluid and after normal diet, III, 287.
- Meyer, F. R., and Ronge, G., removal of oxygen from gases with active copper, I, 36.
- Meyer, G. See Vogt, A.
- Meyer, H. See Zeile, K.
- Meyer, H. H., hormone of fish retina, III, 639. Melanophore hormone in fish pituitary, III, 641. Action of cardiac extracts of *Buccinum undatum*, L., on the heart of *Raja clavata* and *Gadus morhua*, III, 680.
- Meyer, Jacob, Spier, E., and Neuwelt, F., basal secretion of digestive enzymes in old age, III, 415.
- Meyer, Jacques. See Sartory, A.
- Meyer, Julius, and Kienitz, H., complex halogen salts of trivalent rhodium, I, 37.
- Meyer, J. H. See Matthews, N. L.
- Meyer, Karl (Columbia, N.Y.), and Chaffee, E., hyaluronic acid in pleura fluid associated with malignant tumour involving pleura and peritoneum, III, 424, 588. Mucopolysaccharide acid of cornea and possible relation to the "spreading factor," III, 708.
- Hobby, G. L., Chaffee, E., and Dawson, M. H., relationship between "spreading factor" and hyaluronidase, III, 708.
- Meyer, Kurt. See Schenck, R.
- Meyer, K. A., and Amtman, L., sulphapyridine in Friedländer's septicæmia, III, 245.
- Hoffman, S. J., and Amtman, J. K., diaphragmatic hernia in newborn, III, 371.
- Meyer, K. H., history of theory of rubber elasticity, I, 71. Mixing entropy of systems containing long-chain compounds, and its statistical explanation, I, 118. Constitution of amylose and amylopectin of maize starch, II, 268.

- Meyer, K. H., and Bernfeld, P., starch. V. Amylopectin. VII. Fine structure of the starch granule and the phenomena of swelling, II, 337.
- Bernfeld, P., and Hohenemser, W., starch. VI. Acetates and nitrates of amylose and amylopectin, II, 337.
- Bernfeld, P., and Wolf, Eberhard, starch. III. Fractionation and purification of natural maize, II, 336.
- Brentano, W., and Bernfeld, P., starch. II. Non-homogeneity of starch, II, 336.
- and Klemm, O., solubility of glycine anhydride, I, 157.
- Werthm, M., and Bernfeld, P., starch. IV. Methylation and determination of terminal groups of amylose and amylopectin of maize, II, 337.
- Wolf, Eberhard, and Boissonnas, C. G., properties of polymerides in solution. XII. Free energy and heat of dilution; system rubber-toluene, I, 293.
- and Wyk, A. J. A. van der, properties of polymerides in solution. XV. Summary of thermodynamic properties of binary liquid systems, I, 293.
- See also Boissonnas, C. G.
- Meyer, K. P., state of chlorophyll in the plant, and in extracts and pure preparations, III, 549.
- Meyer, R., [bacterial] decomposition of cellulose under reduced oxygen tension, III, 166.
- Meyer, R. K., and Kupperman, H. S., hypersecretion of gonadotropic hormone of rats resulting from treatment with gonadotropic serum, III, 214.
- See also Biddulph, C., Finerty, J. C., Hasler, A. D., Rothchild, I., and McShan, W. H.
- Meyer-Cordas, W., X-ray absorption measurements of solid chemical compounds on filter-paper, I, 199.
- Meyer-Delius, M. See Weidlich, H. A.
- Meyerbach, F., and Loewenberg, R. D., bilateral ring scotoma of five years' duration, III, 204.
- Meyerhof, B. See Ball, E. G.
- Meyerhof, H. L., lymphocytosis by extracts from lymph nodes, III, 704.
- and Zironi, A., embryonic extracts and sex organs, III, 658.
- Meyerhof, O., use of radioactive phosphorus in glycolysis and fermentation, III, 151.
- and Perdigon, E., phosphorylating glycolysis in embryo extracts, III, 609.
- Meyering, J. L., Smits' theory of complexity and allotropy, I, 152.
- Meyers, V. C., and Mangun, G. H., creatine, phosphorus, and potassium in muscle tissues, III, 390.
- Meyler, L., shock, III, 103.
- Meyrowitz, R. See Hart, D.
- Mezen, J. F. See Hair, G. W.
- Mezincesco, M. D., and Szabo, F., diet of Rumanian peasants; value of the coefficient of utilisation of nitrogen in the diet, III, 672.
- Miasojedov, N. N. See Lebedinski, V. V.
- Micale, G., retention of corpus luteum after removal of gravid uterus, III, 850.
- Michael, A., relations of "oxygen and peroxide effect" and of hypochlorous acid addition to the structures of unsaturated organic compounds, II, 1.
- Michael, A., and Carlson, G. H., 1:2 and 1:4 addition. IV. Nitrogen tetroxide and isobutylene. V. Nitrogen tetroxide and tetramethylethylene, II, 113.
- and Weiner, N., solvent and peroxide effect in the addition of hydrogen bromide to trimethylethylene, II, 1.
- Solvent and peroxide effect in the addition of hydrogen bromide to unsaturated compounds. IV. isopropylethylene, II, 321.
- Michael, A. C. See Taylor, F. W.
- Michael, E. G., rapid method of staining frozen sections of tissues requiring immediate diagnosis, III, 702.
- Michael, P., blood-sugar studies on golfers, III, 883.
- Michaelides, A., toxins of meningococci [in mice], III, 169.
- Michaelis, K. O. A. See Linstead, R. P.
- Michaelis, L., Schubert, M. P., and Granick, S., semiquinone radicals of the thiazines, II, 110.
- See also Granick, S.
- Michailov, B. M., and Tschernova, N. G., synthesis of polycyclic compounds. II. Reformatsky reaction with 9-methyl-1:2-benzanthrone-10, II, 172.
- See also Tschernova, N. G.
- Michailov, G. P., and Tschitschenko, D. V., constancy of the valency angles of the carbon tetrahedron; dipole moments of stereo-isomeric $\beta\gamma$ -dichloro- $\Delta\beta$ -butenes, I, 10.
- Michailov, I. G., velocity and absorption of ultra-acoustic waves in binary liquid mixtures, I, 290.
- Michailov, N. V. See Kargin, V. A.
- Michailova, E. G. See Ivanov, K. I.
- Michailovskaja, V. I. See Fortunatov, M. S.
- Michalev, P. F., periodic layers, I, 440.
- Uljanov, A. A., and Schemjakin, F. M., influence of radiations during corrosion of metals on the destruction of periodic precipitates of $\text{Ag}_2\text{Cr}_2\text{O}_7$ in gelatin, I, 212.
- See also Schemjakin, F. M.
- Michalski, M. See Kemula, W.
- Michel, F., and Emde, H., formation of thiol groups during the hydrolysis of snake venoms and proteins, III, 314.
- Michcev, V. S. See Kornilov, I. I.
- Michel, H. O., and Harris, J. S., blood pigments: properties and determination with special reference to spectrophotometric methods, III, 377.
- Michel-Lévy, A., and Wyart, J., formation of cristobalite and quartz by reheating vitreous silica under high pressure, developed with the aid of explosives, I, 328.
- Michelangioli, G. See Balzar, M.
- Michelazzi, A. M. See De Renzi, S.
- Michels, H. See Noack, K.
- Michelson, H. See Levine, D. B.
- Michelson, L., and Wilcox, A., rapid thick film blood stain [for parasites], III, 837.
- Michelson, N. J. See Ginezinski, A. G.
- Michetti, G., and Beltrami, G., cestrogenic substances in gastric juice, III, 128.
- Michimoto, H., kephalin and blood coagulation, III, 94.
- Michnevitsch, G. L., and Ovtshinikova, E. N., deactivation of the surface effects taking place during crystallisation of a supercooled organic liquid in thin layers. I, I, 110.
- Mickel, E. See Simonnet, H.
- Mickelsen, O., Waisman, H. A., and Elvehjem, C. A., distribution of riboflavin in meat and meat products, III, 428.
- See also Waisman, H. A.
- Mickelson, M. N., and Werkman, C. H., formation of trimethylene glycol from glycerol by *Aërobacter*, III, 540.
- Mickle, F. L. See Stuart, C. A.
- Miczyski, K., *jun.*, genetics of the phenol colour reaction in wheat, III, 81.
- Middlehurst, D., and Weller, R., polarising properties of cellophane, I, 235.
- Middleton, A. R., and Wakerlin, G. E., effect of parenteral liver extract on fission rate of *Paramecium caudatum*, III, 312.
- Middleton, G., automatic pipette, I, 395.
- Middleton, W. See Cork, J. M.
- Mider, G. B., and Morton, J. J., effect of methylcholanthrene on latent period of lymphomatosis in dilute brown mice, III, 226.
- Effect of methylcholanthrene on latent period of breast tumours in dilute brown mice, III, 315.
- See also Morton, J. J.
- Mielke, H. See Bachmann, W.
- Mierdel, G., striking of the long positive column in rare gases and mercury vapour, I, 137.
- Mies, H., action of prostigmine, III, 153.
- Miescher, E., and Rosenthaler, E., rotational analysis of the band spectrum of boron monobromide, I, 281.
- Miescher, G., light tolerance and light carcinoma in white mice, III, 316.
- Photophysiology of the skin, III, 504.
- and Minder, H., darkening phenomenon of pigment, III, 420.
- [Skin] pigment darkening caused by long-wave ultraviolet light, III, 529.
- Miescher, K., Hunziker, F., and Wettstein, A., steroids. XXV. Homologues of the testicular hormone. II. 20-Norprogesterone, II, 180.
- Mieses-Reif, M., clinical experiences with vitamin-C in eye diseases, III, 114.
- Migdal, A., and Pomeranchuk, J., ends of the mesotron tracks observed in an expansion chamber, I, 308.
- Mignault, J. W. See Reifenstein, E. C., *jun.*
- Mihalkovits, S., determination of diastase, III, 73.
- Mijerson, A. J., tail reactions in rats, III, 569.
- Mikkelsen, V. H., nicotinic acid and its amide, II, 140.
- Mikluchin, G. P. See Vasserman, E. S.
- Mikschik, E. See Janke, A.
- Milas, N. A., and Maloney, L. S., hydroxylation of unsaturated substances. VI. Catalytic hydroxylation of cyclopentadiene, II, 306.
- and Panagiotakos, P. C., organic peroxides. VII. Dinicotinoyl peroxide, II, 314.
- Milatz, J. M. W., and Rutgers, G. A. W., total and specific ionisation of Po α -particles and their statistical fluctuations. II, I, 139.
- See also Ornstein, L. S.
- Milazzo, G., and Giacomello, G., spectrographic researches on molecular compounds between organic molecules in solution. I. β -Carotene and deoxycholic acid in a mixed solvent containing ethyl alcohol and carbon tetrachloride in the ratio 2:1, I, 256.
- See also Caglioti, V., and Intonti, R.

- Milbrath, J. A., tomato tip-blight virus, III, 358.
- Miles, D. W. See Gay, F. P.
- Miles, F. D., Niblock, H., and Wilson, G. L., vapour pressure of oleum, I, 154.
- See also Wilson, G. L.
- Miles, W. R., experimental modification of polarity potential of human eye, III, 395.
- Miletto, P. See Laporta, M.
- Miletzky, O. See Dueuing, J.
- Milhorat, A. T., Weber, F. C., and Toscani, V., metabolic studies in dermatomyositis and the effect of wheat germ, III, 753.
- See also Stewart, H. J.
- Milianczuk, B., summation rules in normal "forced" dipole multiplets, I, 423.
- Miljutin, G. A., and Schalit, S. S., magneto-thermal properties of anomalous paramagnetic salts at low temperatures, I, 64.
- Milk Nutrition Committee, milk and nutrition. IV. Effects of dietary supplements of pasteurised and raw milk on growth and health of school children (final report), III, 47.
- Milla, E., and Capraro, V., utilisation of lactic acid in eviscerated dogs, III, 58.
- Utilisation of lactic acid by decerebrate dogs, III, 717.
- See also Capraro, V.
- Millar, H. C., and Darrow, D. C., effect of changes in muscle-electrolyte on response of skeletal muscle to tetanic stimulation with particular reference to potassium, III, 795.
- Millar, H. R., blood-sugar determination, III, 96.
- Millen, J. L. E. See Barcroft, H.
- Miller, A. J. See Lampton, A. K.
- Miller, A. R., adsorption of dipoles, I, 158, 292.
- Miller, A. T., jun., acclimatisation to carbon dioxide; chemical and cellular changes in blood, III, 886.
- and Jones, J. M., composition of intrapleural air in artificial pneumothorax, III, 479.
- Miller, B. F., Alving, A. S., and Rubin, J., renal excretion of inulin at low plasma concentrations of this compound, and its relationship to glomerular filtration rate in normal, nephritic, and hypertensive individuals, III, 221.
- and Baker, Z., inhibition of bacterial metabolism by detergents, III, 828.
- Baker, Z., and Harrison, R. W., action of a quaternary type of wetting agent on metabolism of micro-organisms associated with dental caries, III, 451.
- See also Alving, A. S., and Baker, Z.
- Miller, B. J., effect of hyperfine structure on magnetic rotation of the plane of maximum polarisation of resonance radiation, I, 381.
- and Reimann, S. P., effect of *dl*-methionine and *l*-cysteine on cleavage rate of mammalian eggs, III, 464.
- Miller, (Miss) C. C., micro-immersion filter, I, 84.
- Volumetric determination of small quantities of barium and sulphate with barium rhodizonate as indicator; determination of sulphur in iron pyrites, I, 268.
- and McLennan, I. C., 8-hydroxyquinoline as a reagent for the determination of magnesium, especially in carbonate and silicate rocks, I, 300.
- and Lowe, A. J., qualitative semimicro-analysis with reference to Noyes and Bray's system; gold group; tantalum and tungsten groups, I, 419.
- Miller, C. D., determination of a curve of response to synthetic crystalline thiamin for use in the vitamin-B₁ assay of foods by the rat growth method, III, 51.
- and Robbins, R. C., analysis and vitamin assays of opihi, the Hawaiian limpet, III, 427.
- Miller, C. G., drying laboratory glassware, I, 134.
- Miller, C. O., and Roberts, R. G., proteins in liquid ammonia. V. Reaction of sodium in liquid ammonia with peptones and related substances, II, 112.
- Miller, C. S. See Kolthoff, I. M., and Moore, M. L.
- Miller, E., Sprague, J. M., Kissinger, L. W., and McBurney, L. F., preparation of amino-sulphonamides, II, 339.
- See also Crossley, F. S., and Moore, M. L.
- Miller, E. E. See Thomas, C. C.
- Miller, E. G., jun. See Kurczok, R.
- Miller, E. J. See Petering, H. G.
- Miller, E. M., Parmelee, A. H., and Sanford, H. N., diaphragmatic hernia in infants, III, 782.
- Miller, E. P. See Lark-Horovitz, K.
- Miller, E. S., Barnes, R. H., Kass, J. P., and Burr, G. O., spectrophotometric method for study of fat transport and phosphorylation, III, 57.
- See also Barnes, R. H.
- Miller, E. V., Winston, J. R., and Fisher, D. F., production of epinasty by emanations from normal and decaying citrus fruits and from *Penicillium digitatum*, III, 943.
- Winston, J. R., and Schomer, H. O., plastid pigments in rinds of maturing oranges, III, 945.
- See also Park, T.
- Miller, F., jun., single-crystal X-ray diffraction pattern of calcite, I, 12.
- Miller, F. R., Stavaky, G. W., and Woon-ton, G. A., effects of eserine, acetylcholine, and atropine on the electrocorticogram, III, 571.
- Wearn, J. T., and Heinle, R. W., proliferation of myeloid and lymphoid cells induced by extracts of urine from leukemic patients, III, 7.
- Miller, F. S., safety on Delaware aqueduct; [control of silicosis and toxic gases], III, 529.
- Miller, G. L. See Du Vigneaud, V.
- Miller, H., is myopia a deficiency disease? III, 399.
- and Piness, G., potassium salts in hay fever, III, 761.
- See also Kiene, H. E., and Piness, G.
- Miller, H. C., familial occurrence of icterus gravis, congenital anaemia of the newborn, and erythroblastosis foetalis: case study, III, 377.
- and Ross, R. A., relation of hypoglycaemia to symptoms observed in infants of diabetic mothers, III, 561.
- Miller, H. C. (Curacao), and Bliss, H., system isopropyl ether-isopropanol, I, 117.
- Miller, H. G., myasthenia gravis and thymus gland, III, 480.
- Miller, H. R., occurrence of coronary artery thrombosis in polycythemia vera, III, 182.
- and Spiegel, E. A., picrotoxin-barbiturate antagonism in decorticated animals, III, 111.
- Sleep induced by subthalamic lesions with hypothalamus intact, III, 571.
- Miller, J. G., discrimination without awareness, III, 204.
- See also Sterling, K.
- Miller, J. H., and Bruger, M., cold-pressor reaction in normal subjects and in patients with primary (essential) and secondary (renal) hypertension, III, 293.
- Miller, J. M. See Mayo, C. W.
- Miller, J. W., pathologic changes induced by lead and its compounds, III, 927.
- Miller, Leonard C. See Allison, S. K.
- Miller, Lloyd C., U.S.P. (1939-40) digitalis assay, III, 923.
- Miller, L. L., anaphylactic shock and nitrogen metabolism in dogs, III, 432.
- and Hahn, P. F., appearance of radioactive iron as haemoglobin in red cell; significance of "easily split" iron, III, 791.
- and Whipple, G. H., chloroform liver injury and protein stores in dogs; nitrogen metabolism, III, 311.
- Miller, L. P., synthesis of *o*-chlorophenol- β -D-glucoside, II, 245.
- Induced formation of β -gentiobiosides in gladiolus corms and tomato plants treated with chemicals, III, 776.
- Formation of β -*o*-chlorophenylgentiobioside in gladiolus corms from adsorbed *o*-chlorophenol, III, 831.
- Miller, M. See Price, J. W.
- Miller, M. M., and Allen, O. P., mathematical evaluation of endogenous insulin secretion, III, 411.
- Miller, M. W. See Adams, R.
- Miller, N. J., Garrett, O. W., and Prickett, P. S., anaerobic technique—a modified deep agar shake, III, 172.
- Miller, P., and Dodge, B. F., system benzene-nitrogen; liquid-vapour phase equilibria at elevated pressures, I, 215.
- Miller, P. A. See Mueller, J. H.
- Miller, P. H., jun., and Du Mond, J. W. M., validity of the X-ray crystal method for determining *N* and *e* with aluminium, silver, and quartz, I, 144.
- Miller, R. A., and Riddle, O., stimulation of adrenal cortex of pigeons by anterior pituitary hormones and by their secondary products, III, 121.
- Miller, R. C. See Madison, L. C.
- Miller, R. D. See Bundesen, H. N.
- Miller, R. E. See Rose, S. B.
- Miller, R. N., telencephalon of *Corydora paliatus*, III, 716.
- Miller, S. H. See Rapaport, H. G.
- Miller, V. A. See Cramer, P. L.
- Miller, W. H. See Gregg, D. C., and Iddles, H. A.
- Miller, W. J. See Vosburgh, W. C.
- Miller, W. T., Murdoch, F. M., and Heishman, J. O., use of large doses of sulphanilamide in treatment of chronic streptococcal mastitis, III, 245.
- Miller, William T., action of fluorine on simple aliphatic chlorinated hydrocarbons, II, 147.
- Preparation of *as*-tetrachlorodifluoroethane, II, 201.
- See also Bernstein, J.
- Millet, R. See Grumbach, A.
- Milietti, M., *in-vitro* growth of fibroblasts in media containing pre- and post-operative human serum, III, 374.
- In-vitro* growth in presence of Koch's bacilli (human type) of leucocytes from tubercular patients, III, 377.
- Milligan, A. D. See Ruth, H. S.
- Milligan, W. O. See Weiser, H. B.
- Millikan, C. R., influence of nutrition on the reaction of wheat to *Urocystis tritici*, Koern. I. and II., III, 366.

- Millikan, G. See Chance, B.
- Millikan, G. A., muscle-haemoglobin, III, 391.
- Millman, S., and Kusch, P., radio-frequency spectra of sodium, rubidium, and caesium, I, 423.
See also Kusch, P.
- Mills, C. A. See Colvin, J. W., and Owens, L. B.
- Mills, E. J., jun., and Bogert, M. T., synthesis of pyrimidines and uric acids from cystamine, II, 290.
- Mills, E. S. See Falconer, E. H., and Townsend, S. R.
- Mills, G. A., dissociation of carbonic acid in ordinary and heavy water, I, 214.
and Urey, H. C., kinetics of isotopic exchange between carbon dioxide, hydrogen carbonate ion, carbonate ion, and water, I, 325.
- Mills, G. F. See McBain, J. W.
- Mills, J. A. See Gillespie, D. T. C.
- Mills, J. W. See Phillips, J.
- Mills, W. H. See Lidstone, A. G.
- Milne, G. G. See Herzberg, G.
- Milone, M., X-ray analysis of complex salts of glyoximes with bivalent nickel, I, 151. Urticarial action of chloroximes, III, 66.
and Massa, A., new isomeride of trinitrotoluene, II, 210.
and Tappi, G., electric moments of heterocyclic compounds with condensed nuclei, I, 148.
- Milosavljević, D., and Jovanović, M., determination of mol. wt. at low pressures by means of V. Meyer's method, I, 177.
- Milotvorskaja, L. See Gorodisskaja, G. J.
- Milton, G. J. G. See Crowley, G. P.
- Minakawa, O., neutron-induced radioactivity of tungsten, I, 340.
- Minard, D., and Rosenthal, S. R., thymoxyethyl-diethylamine antagonism to circulatory effects of histamine in anaesthetised and unanaesthetised dogs, III, 709.
See also Rosenthal, S. R.
- Minarik, C. E., and Shive, J. W., effect of boron in the substrate on calcium accumulation by soya-bean plants, III, 457.
- Minato, A. See Ogata, A.
- Minatschev, C. M. See Juriev, J. K.
- Minchilli, M. See Musajo, L.
- Minckler, J., morphology of nerve terminals of human spinal cord with estimates of the total number per cell, III, 715.
- Mindell, A., Esselen, W. R., and Fellers, C. R., effect of apples and cranberries on calcium retention, III, 143.
- Minder, E. G., vitamin-B₁ and leprosy, III, 144.
- Minder, H. See Miescher, G.
- Mindlin, R. L., variations in concentration of ascorbic acid in plasma of newborn infant, III, 594.
- Miner, (Miss) H. I., Hook, E. O., and Coghill, R. D., thiamorpholine [thiazine, tetrahydro-1:4-thiazine] series. II. N-Alkyl derivatives, II, 315.
See also Hook, E. O.
- Ming-Tzu, P., cutaneous nerves of Chinese hand, III, 180. Sural nerve in Chinese, III, 180.
- Mingoa, Q., synthesis of benzedrine, II, 273.
- Minguzzi, C., new silicate of copper and calcium in the Vesuvian products, I, 239.
- Minibek, H., improved absorption of vitamin-A, III, 231.
and Veržar, F., effect of exercise on the flavin content of the liver, III, 593.
- Minina, E. G., Igritzkaja, E. B., and Mazkevitch, P. P., effect of soil and air humidity and of the temperature of the air on formation of spikelets in the ear of wheat, III, 615.
- Minkowski, M., cerebral visual pathways, III, 111.
- Minniti, G., pyrophosphatase activity in human foetal tissue. I., III, 179.
- Minor, F. W. See Ludwig, C. A.
- Minor, G. R. See Chanutin, A., and Ludwig, S.
- Minot, A. S., Dodd, K., Keller, M., and Frank, H., state of nutrition with respect to vitamin-C in a southern pediatric clinic, III, 819.
Dodd, K., and Riven, S. S., guanidine in myasthenia gravis, III, 20.
- Minot, G. See Lian, C.
- Minot, G. R., anamias of nutritional deficiency, III, 276.
- Mintz, M. See Geist, S. H.
- Minz, B., effect of aneurin on "cholinergic" elements, III, 232.
- Mir-Salimov, M., effect of a diet qualitatively insufficient in protein on tissue metabolism, III, 142. Effect of diet containing vitamins but no protein on tissue metabolism, III, 142.
- Mira, E., myokinetic psycho-diagnosis: exploring the conative trends of personality, III, 572.
- Mirick, G. S. See Farr, L. E., and MacLeod, C. M.
- Miropolski, L. M., fluorite in the Kungur deposits of Tataria, I, 239.
- Mirski, A., and Wertheimer, E., assimilation of sugar by living yeast: changes occurring during the first few minutes, III, 165.
- Mirsky, I. A., and Nelson, N., influence of pancreas and liver on oxidation of ethyl alcohol, III, 240.
See also Abramson, D. I., Grayman, I., and Nelson, N.
- Misch, L. C., and Wyk, A. J. A. van der, lattice of rubber, I, 101.
- Mischtschenko, K. P. See Borakso, C. I., and Zilberman, J. I.
- Misciattelli, P., study of hydration of thorium salts by means of emanating power and magnetic susceptibility, I, 236. Reduction of organic copper complexes by cold formaldehyde, I, 298.
- Miseliuk, E. G., photo-sensitivity of Bekerel cuprous oxide electrodes, I, 79.
- Misener, A. D., specific heat of superconducting mercury, indium, and thallium, I, 201.
- Mislin, H. See Zeller, E. A.
- Misra, P. See Allsopp, A.
- Misra, R. D., stability of crystal lattices, I, 238.
- Misiroli, A., biological control of anti-malarials, III, 438.
- Missiutkina, M. See Tomme, M.
- Missbeck, H. See Rietschel, H.
- Missovski, L. V. See Shdanov, A. P.
- Mistretta, A. G., and Nord, F. F., Gattermann synthesis of aldehydes, II, 243.
- Mitani, M., exchange reaction between ammonia and hydrogen in presence of platinum catalyst. I., I, 78.
- Mitchele, J. S., increase in ultra-violet absorption of cytoplasm after therapeutic X- and γ -radiation, III, 865.
- Mitchell, A. C. G., Langer, L. M., and McDaniel, P. W., nuclear radiations from antimony and arsenic, I, 338.
See also Langer, L. M.
- Mitchell, A. G. See Duffy, C. E., and Warkany, J.
- Mitchell, D. M. See Wintrobe, M. M.
- Mitchell, E. C., and Goltman, D. W., progeria, III, 834.
- Mitchell, G. A. G., macroscopic study of nerve supply of stomach, III, 873.
- Mitchell, H. H. See Burroughs, E. W., Lawrenz, M., and Shields, J. B.
- Mitchell, H. K., Snell, E. E., and Williams, R. J., pantothenic acid. IX. Biological activity of hydroxypantothenic acid, II, 299.
Weinstock, H. H., jun., Snell, E. E., Stanbery, S. R., and Williams, R. J., pantothenic acid. V. Evidence for structure of non- β -alanine portion, II, 299.
See also Williams, R. J.
- Mitchell, H. S., and Cook, G. M., effect of exercise on growth and cataract development of rats fed galactose, III, 489.
- Cook, G. M., and O'Brien, K. L., effect of several calcium salts on utilisation of [dietary] lactose, III, 319.
- Mitchell, J., jun. See Bryant, W. M. D., and Smith, D. M.
- Mitchell, J. H. See Lease, E. J.
- Mitchell, J. H., jun. See Thornton, M. H.
- Mitchell, J. J., and Mayer, J. E., electron affinity of chlorine, I, 184.
- Mitchell, J. S., wave-length effect in reaction of human skin to X- and γ -radiation, III, 446.
- Mitchell, P. C. See Peters, C. A.
- Mitchell, R. H. See Pringle, B.
- Mitchell, R. L., and Ritter, G. J., composition of hemicellulose isolated from maple wood, II, 365.
- Mitchell, S., and Simpson, G. K., rotatory dispersion and circular dichroism of l-menthyl d- β -chloro- β -nitrosobutyrate, I, 313.
- Mitchell, W., acetylation of d- ψ -ephedrine and l-ephedrine, II, 343.
See also Martin, W. F.
- Mitchell, W. J., Bower, A. G., and Hamilton, P. M., use of sulphapyridine in *Streptococcus viridans* meningitis, III, 757.
- Mitra, D. D., diet and nutrition in North Bengal, Upper Assam, and Calcutta, III, 318.
- Mitra, K., dietary and nutrition survey at Jamshedpur, an industrial town in Bihar, III, 817.
- Mitra, H. C., and Roy, A. C., nutrition studies in Bihar. III. Determination of carotene and ascorbic acid in common fruits and vegetables, III, 673.
- Mitra, M. C. See Basu, N. M.
- Mitra, S., polarised fluorescence of organic compounds, I, 196. Influence of foreign substances on absorption of dyes in solution, I, 244.
- Mitra, S. K., Ray, B. B., and Ghosh, S. P., cross-section of atomic oxygen for elastic collision with electrons, and region F absorption, I, 336.
See also Chakrabarty, N. K.
- Mitra, S. M., Raman effect in arsenates and heat of dissociation of As-O, I, 243. Splitting of spectral lines at scattering by liquids, I, 311.
- Mitropolitanskaja, C. L. See Abramov, V. S.
- Mitropolitanskaja, R. L. See Koschtojan, C. S.
- Mitter, P. C., and Bagchi, P. N., long-chain acids. I. Extension of the isoprene rule, II, 34.

- Mitter, P. C., and Dutta, P. C., long-chain acids. II. Aleuritic acid, II, 203.
and Mukherjee, H., action of oxalyl chloride on phenolic ethers, II, 46.
- Mittra, H. C. See Mitra, K.
- Mittra, R. N., periodic precipitation in absence of foreign gel. III. Ferric phosphate and ferric arsenate sols. IV. Ferric borate sol, I, 390.
- Mitts, A. E. See Barkenbus, C.
- Mituda, H., vitamin-C. IV. Isolation, III, 752.
- Mituya, A., hydrogen electrode processes on mercury, I, 324.
- Mitzelowski, E. S., and Ormont, B., electrochemical oxidation of cobalt, I, 417.
- Miura, K., chemotherapeutic properties of derivatives of the apoquinine and sulphamide series in pneumococcal streptococcal infections; combined therapy with ethylapoquinine and 2-(*p*-amino-benzenesulphonamido)pyridine, III, 919.
- Miwa, M., Yamashita, H., and Mori, K., lethal action of α -rays on sea-urchin eggs, III, 125.
See also Mori, K.
- Miyakawa, T. See Nakaidzumi, M.
- Miyake, M., experimental studies on sugar puncture [action of adrenaline], III, 211.
- Miyake, S., study of the corrosion of iron by electron diffraction, I, 80.
- Miyake, Y., study of veratrine contraction with special reference to action of quinine [on muscle], III, 107.
- Miyake, Yasuo, Western Pacific Ocean. V. and VI. Vertical variation of minor constituents in the "Kurosio" region, I, 135.
- Miyaki, K., and Kataoka, H., hydrogenation under pressure of 6-hydroxyquinoline and its derivatives, II, 234.
- Miyamoto, G. See Sagane, R.
- Miyamoto, S., hygienic study of modern high building as viewed from its environments, III, 256. New device for determining carbon dioxide in air, III, 274.
- Miyazaki, M., band spectra of sulphur and selenium excited in ignition tubes containing mixtures of hydrogen and oxygen with traces of sulphuric acid and selenium, I, 241.
- Miyasaka, M., 6-benzoyloxyhydrind-1-ol, II, 82. Reduction of 7-hydroxy-4-keto-1:2:3:4-tetrahydrophenanthrene with sodium and amyl alcohol, II, 217.
- Miyata, A., residual active layer [of aluminium oxide], I, 253. Dielectric behaviour of anodic aluminium during its formation, I, 362. Frequency characteristics of anodic aluminium during formation, I, 362.
See also Ishikawa, S.
- Miyata, T. See Ogonuki, H.
- Miyazi, S., and Isaka, H., α - and β -7-hydroxy-3-ketocholanic acid, II, 254.
- Miyazima, T., Aiki, T., and Kosaka, H., swim bladder gases, III, 105.
- Mizoguti, S., genesis of post-operative jejunal ulcer, III, 908.
- Mizuguchi, Y. See Watanabe, Y.
- Mizushima, S., Morino, Y., and Nakamura, S., Raman effect and dipole moment in relation to free rotation. XII. Raman spectra of ethylene chlorohydrin, *n*-propyl chloride, and *n*-butane in the liquid and solid states, I, 346.
- Morino, Y., and Suzuki, A., Raman effect and dipole moment in relation to free rotation. XI. Raman spectra of deuterio- α -dibromoethanes, I, 9.
- Mizuta, K. See Kameyama, N.
- Mizutsch, K. G., and Savtschenko, A. J., determination of primary, secondary, and tertiary amines and ammonia present together, II, 241.
- Mladoveanu, C., Vasilco, O., and Gheorghiu, P., magnesium sulphate and calcium chloride in aconitine poisoning, III, 444.
- Mo, W. W., Hsü, Y. K., and Band, W., influence of magnetisation on the Benedicks homogeneous thermoelectric effect, I, 351.
- Mochel, J. M. See Scatchard, G.
- Mochizuki, Y., papilla foliata of Japanese. I. Number of papillae foliatae. II. Number of taste buds, III, 301.
- Modak, K. V. See Prasad, M.
- Modell, W., chlorazol-fast-pink BKS as anti-coagulant, III, 93.
- Modern, F., and Ruff, G., peptic proteolysis of antidiaphtheric serum, III, 355.
- Modern, F. S. See Drake, M. E.
- Modic, J. L. See Heymann, W.
- Modlin, L. R., jun. See Burger, A.
- Möglich, F., mechanism of luminescence of crystalline phosphors, I, 430.
- Riewe, K. H., and Rompe, R., influence of ionisation and dissociation on specific heat, I, 104.
- Moehlig, R. C., thyroid gland disturbance as cause of unexplained fever, III, 725. Deoxycorticosterone in myasthenia gravis, III, 888. Addison's disease treated by implantation of deoxycorticosterone acetate pellets, III, 897.
- and Pino, R. H., retinitis pigmentosa, III, 803.
- Moellendorff, W. von, production of pathological mitoses in tissue cultures by carcinogenic hydrocarbons and sex hormones, III, 141.
- Möllenstedt, G. See Kossel, W.
- Möller, E. See Brachner-Mortensen, K.
- Möller, H., and Leschewski, K., addition of carbon monoxide to compounds of univalent copper, I, 109. Absorption of carbon monoxide in solutions of cupric salts in sodium hydroxide, I, 207. Action of carbon monoxide on ammoniacal solutions of cupric salts. III. Absorption of carbon monoxide in different cupriamine solutions having the same concentration of copper. IV. Absorption of carbon monoxide in solutions of cupriamine salts at different concentrations of copper and in solutions of cupriamine salts with oxidising anions, I, 260.
- Moeller, T., hydrous lanthanum hydroxide as emulsifying agent, I, 161. Indium. I. Indium oxalate and oxalatoindates, I, 418.
- Møllgaard, H., disturbance of central nervous system in avitaminosis-A in pigs, III, 511.
- Moelwyn-Hughes, E. A., influence of solvent on strength of the hydrogen bridge, I, 358.
- and Johnson, P., kinetics of decomposition of benzenediazonium chloride in water, I, 415.
See also Johnson, P.
- Mönch, G., photopotential of the element metal-semiconductor-metal. V. Polycrystalline cuprous oxide at low temperatures. VI. Normal photopotential of the inner photo-electric effect, I, 97, 147.
- Mönninghoff, F. H., cell autolysis in "cloudy swelling" and in "cadaverous changes," III, 626.
- Moersch, F. P. See MacLean, A. R.
- Moersch, H. J. See Hinshaw, H. C.
- Möschl, H., encephalitis and Graves' disease, III, 303.
- Moeschlin, S., carbohydrate metabolism in acute carbon monoxide poisoning, III, 150.
- Moetsch, J. C. See Raiziss, G. W.
- Moewus, F. See Kuhn, R.
- Moffat, W. M., effect of anterior pituitary-like sex hormone on blood picture in man, III, 494.
See also Gray, P. A.
- Moffett, M., gonococcal chemotherapy in women and children, III, 920.
- Moffett, W. E. See Pearl, R.
- Mogensen, E., spontaneous hypoglycaemia in Simmonds' disease, III, 847.
See also Aisted, G.
- Moggridge, R. C. G. See Harington, C. R.
- Moglia, J. A. See Cicardo, V. H.
- Mohammad, A., Emerson, O. H., Emerson, Gladys A., and Evans, H. M., multiple nature of the rat "filtrate factor" (component of vitamin-B₂), III, 234. Filtrate factor of vitamin-B₂ complex and its multiple nature, III, 429.
- Mohammed, A. H. See Hassan, A.
- Mohler, F. L., number of lines in a series as a function of electron pressure, I, 88.
- Mohler, W., and Sorge, J., chemical war materials. XIII. Light absorption of tear gases in the short-wave ultra-violet. XIV. Spectroscopic determination of war materials. XV. Parachors of $\beta\beta'$ -dichlorodiethyl sulphide, β -chlorodiethyl sulphide, diethyl sulphide, and thioglycol; simple apparatus for determining surface tension, I, 145, 150.
- Mohr, C. B. O., and Massey, H. S. W., polarisation of electrons by double scattering, I, 399.
- Mohr, C. F. See Moore, J. E.
- Mohr, H., determination of oxidation-reduction potential and calculation of results, I, 75.
See also Eggers, H.
- Mohrman, H. W. See Emerson, W. S.
- Mohrnhelm, A. See Nowotny, H.
- Mohs, F. E., effect of sex hormones on growth of transplanted mammary adenofibroma in rats, III, 506. Effect of oestrogens and androgens on growth of mammary fibroma in rats, III, 589.
- Moir, C., effective methods of using oxytoxic drugs in post-partum hæmorrhage, III, 252.
- Moisset de Espanés, E., variations in pressure of aortic circuit after ligation of principal branches of pulmonary artery, III, 564. Cardiac and neuromuscular effect of 883 F., III, 601.
See also Gargiulo, A.
- Mokievski, V., and Rebinder, P., effect of surface-active substances on mechanical properties and formation of soap coagels, I, 293.
- Moldavski, B., and Nizovkina, T., isomerisation of hydrocarbons. IV. Isomeric butanes and their equilibrium mixtures, II, 147.
- Mole, (Miss) J. D. C., and Turner, E. E., intramolecular substitution as a means of comparing activating and deactivating effects, II, 30.
- Molenaar, H., and Roller, D., determination of extracellular water in healthy and diseased subjects, III, 187.

- Moles, E., Toral, (Miss) T., and Escribano, A., limiting densities and mol. wts. of oxygen, carbon dioxide, sulphur dioxide, and hydrogen sulphide; atomic weights for carbon and sulphur, I, 51.
- Molino, J. F. See Castex, M. R.
- Molière, G., evolution of quantum-mechanical dispersion theory by the method of Laue, I, 99.
- Molinari, F. See Romano, N.
- Molitor, H., and Fernandez, L., causes and prevention of iontophoretic burns, III, 256.
- and Robinson, H., toxic manifestations after oral administration of sodium sulphapyridine, III, 60. Oral and parenteral toxicity of vitamin-K₁, phthiocol, and 2-methyl-1:4-naphthoquinone, III, 469.
- and Sampson, W. L., action of large doses of natural and synthetic vitamin-B₁, III, 321.
- Moll, H. H., action of parasympathetic-mimetic drugs in asthma, III, 842.
- and Fowweather, F. S., cholesterol pleural effusion, III, 712.
- Moll, T., and Wieters, H., dehydroascorbic acid, III, 324.
- Molland, J., spectrometry of complex salts of 8-hydroxyquinoline-5-sulphonic acid, I, 126. Determination of traces of metavanadates, I, 175. Inner complex salts of 8-hydroxyquinoline-5-sulphonic acid, I, 230.
- Moller, P. F., chronic fluorine poisoning, III, 928.
- Moller-Christensen, E. See Felding, S.
- Mollwo, L. See Kussmann, A.
- Molnar, S., and Petranyi, J., disturbance in vitamin-B₁ metabolism, III, 857.
- Molony, C. J. See Friedman, T. B.
- Momarenko, M. E. See Salkind, J. S.
- Mombaerts, J., effect of sex hormones on accessory sex glands C and c in the hedgehog, III, 32.
- Monaghan, J. F. See Strumia, M. M.
- Monasterio, G., agastric anemias, III, 468.
- Mondain-Monval, P., and Gabriel, G., partial miscibility in liquid alloys; system lead-zinc-tin, I, 251.
- and Quiguerez, J., critical opalescence of liquid complexes, I, 155. Binary and ternary systems separating into two liquid layers; inversion of densities, I, 251.
- Monden, M., cystine-cysteine in normal animal, III, 517.
- Moness, E. See Priestley, H. M.
- Monfort, F., inhibition of catalase and abolition of this inhibition, III, 260.
- Monk, A. T., and Compton, A. H., recurrence phenomena in cosmic-ray intensity, I, 189.
- Monnier, A. M., and Coppée, G., relation between rhythmicity of nervous response and resonance, III, 20. Synaptic delay; phase of intracellular electrical transmission, III, 394.
- Monnier, M., action of anæmic decerebration on movements and tone of respiratory muscles, III, 17. Effect of faradic stimulation of bulbar region on respiration, cardiovascular system, bladder, and pupil in cat, III, 298.
- Monnier, R. See Goldberg, M. W.
- Monoghan, J. F. See Beazell, J. M.
- Monroe, A. M. See Thaxton, H. M.
- Monroe, C. F., and Perkins, A. E., pH values of ingesta of bovine rumen, III, 510.
- Monroy, A., [histological] observations of small blood vessels in normal and involuted human thymus gland, III, 895.
- Monseles, G. G., thiosilicates and thioaluminates of heavy metals, I, 215.
- Montagu, M. F., adolescent sterility, III, 661.
- Montague, J. R. See West, E. S.
- Montalti, M., and Maffione, R., variations in ascorbic acid content of orange and lemon juice, III, 595.
- Montana, R. E. See Haworth, W. N.
- Monte, L. A., and Hull, E., mercuric chloride poisoning treated with sodium formaldehydesulphoxylate, III, 760.
- Montemartini, L., effect of caffeine on plant cells, III, 442.
- Montgomery, C. G., and Montgomery, D. D., portable apparatus for recording bursts of cosmic-ray ionisation, I, 42. Behaviour of high-energy electrons in the cosmic radiation, I, 189. Discharge mechanism of Geiger-Müller counters, I, 306. Paralysis of sub-threshold counters, I, 376.
- Montgomery, D. D. See Montgomery, C. G.
- Montgomery, H. See Hill, W. R.
- Montgomery, M. L., Entenman, C., Gibbs, G. E., and Chaikoff, I. L., influence of ingestion of pancreatic juice on liver fat in depancreatised dog maintained with insulin, III, 596.
- See also Entenman, C.
- Montgomery, W. H. See Elsom, K. O.
- Monti, (Signa.) L., derivatives of acridine-5-aldehyde, II, 55.
- and Ferrari di Caporciano, (Signa.) G., quinoline derivatives. IV., II, 54.
- Montignie, E., action of cuprous oxide on various compounds, I, 263.
- Montis, S., structure and function of capillaries in inner ear and eye, III, 114.
- Montolivo, G. See Galli, T.
- Montoro, V., metastable γ -phase of Fe₂O₃ in samples of magnetite undergoing change, I, 274. Mixed crystals in the system FeO-MnO, I, 354. Miscibility between sesquioxides of iron and manganese, I, 355. Accurate measurement of lattice constant of iron, I, 432.
- Montroll, E. W., and Simha, R., theory of depolymerisation of long-chain molecules, I, 430.
- Monypenny, D., early introduction of solid foods in infant diet, III, 425.
- Monzini, G. See Carrara, G.
- Moody, E. E., and Knout, E. G., leukæmoid reaction with sulphapyridine, III, 183.
- Moody, F. B. See Wolfrom, M. L.
- Moody, R. O., and Nuyts, R. G. van, position and mobility of kidneys in healthy young men and women, III, 697.
- Mookerjee, (Miss) A., and Gupta, J., Raman spectra of coumarins and chromones, I, 243.
- Moon, H. D., effect of adrenotropic hormone in 4-day-old rats, III, 495.
- and Hansen, W., response of thyroid-ectomised rats to adrenotropic hormone, III, 495.
- See also Crede, R. H.
- Moon, H. H. See Culpepper, C. W.
- Moon, N. S. See Marvel, C. S.
- Moon, P. B. See Fertel, G. E. F.
- Moon, V. H., shock and related capillary phenomena, III, 276. Occurrence and clinical significance of hæmo-concentration, III, 286. Circulatory failure of capillary origin, III, 565.
- Moon, V. H., Kornblum, K., and Morgan, D. R., pathology of irradiation sickness: a new method of inducing shock, III, 606.
- Mooney, R. C. L., X-ray crystal structure study of tetramethylammonium triiodide, I, 348.
- Moore, A. R. See Bradway, W. E.
- Moore, (Miss) C. E. See Meggers, W. F., and Russell, H. N.
- Moore, C. R., and Bodian, D., opossum pouch young as experimental material, III, 783.
- Moore, D. H., Scheer, J. van der, and Wyckoff, R. W. G., electrophoretic analysis of antipneumococcus horse sera, III, 265.
- See also Abramson, H. A.
- Moore, E. See Höber, R.
- Moore, E. S., alteration of ilmenite, I, 181.
- Moore, F. W. See Gilman, H.
- Moore, G. E., Renquist, M. L., and Parks, G. S., thermal data on organic compounds. XX. Modern combustion data for two methylnonanes, methyl ethyl ketone, thiophen, and six cycloparaffins, I, 361.
- and Webb, H. W., vacuum thermocouple, I, 234.
- See also Becker, J. A., and Parks, G. S.
- Moore, H., glasses, organic and inorganic, I, 63.
- Moore, J. A., temperature-tolerance and rates of development in eggs of amphibia, III, 649.
- Moore, J. E., and Mohr, C. F., syphilis, III, 253.
- Moore, L. A., carotene intake, level of blood plasma-carotene, and development of papillary œdema and nyctalopia in calves, III, 320.
- See also Wetzel, J. O.
- Moore, M., chorio-allantoic membrane of developing chick as medium for cultivation and histopathologic study of pathogenic fungi, III, 74.
- Moore, M. L., and Forbes, R. P., pneumococcal meningitis: sulphapyridine reaction involving mucous membranes, III, 599.
- Miller, C. S., and Miller, E., substituted sulphanilamides. III. N¹-Hydroxy-N⁴-acyl derivatives, II, 340.
- See also Crossley, F. S.
- Moore, M. T., nicotinic acid and thiamin in multiple sclerosis, III, 429.
- Moore, R. A., and Pastore, J. B., erythroblastic splenomegaly occurring during pregnancy, III, 182.
- See also Andrus, W. De W.
- Moore, R. G. D., viscosity relationships of aqueous solutions of sodium oleate and various phenols, I, 19.
- Moore, R. H., micro-Kjeldahl method including nitrates, III, 176.
- Moore, R. M. See Seybold, W. D.
- Moore, S., body-section radiography, III, 371.
- and Link, K. P., characterisation of carbohydrates. I. Oxidation of aldoses by hypoiodite in methanol. II. Identification of seven aldmonosaccharides as benziminazole derivatives, II, 244.
- Moore, T., pyelographic reactions, III, 503.
- Moore, Thomas, effect of vitamin-E deficiency on vitamin-A reserves of the rat, III, 916.
- and Rajagopal, K. R., spectroscopic detection of vitamin-E in rat tissues, III, 431.

- Moore, W. A. See Ruchhoff, C. C.
 Moore, W. H. See Barkas, W. H.
 Moore, W. J., *jun.*, and Taylor, H. S., reactions of ethyl radicals, I, 327. Mercury-photosensitised hydrogenation of ethylene, propylene, and *n*-butylene, I, 368. Photolysis of methyl ethyl ketone, I, 368.
 Moragues, V. See Pinkerton, H.
 Moragues-Gonzales, V. See Casey, A. E.
 Morales, F. H. See Schindler, R.
 Morales-Otero, P., and Gonzalez, L. M., purified antigen from *Brucella*, III, 769. Effect of azosulphamide (neoprontosil) on experimental *welchii* infection in mice, III, 920.
 See also Pomales-Lebrón, A.
 Moran, E. A., Briese, R. R., and Conch, J. F., cyanogenetic plants, III, 777.
 Moran, T., and Booth, R. G., analysis of vitamin-B₁ status of population of Great Britain, III, 750.
 Morando, G. C. See Bonsignore, A.
 Morato, M. J. X., formation of diencephalic pouch of hypophysis, III, 2. Blood supply of hypophysis, III, 277.
 Morax, P. V., paralyses of associated movements of eyes, III, 114.
 Mordecai, I. See Niyogi, S. P.
 Morehead, B. A. See Sampey, J. R.
 Morehouse, M. G., metabolism of two dihydroxybutyric acids as indicated by deuterium content of excreted β -hydroxybutyric acid, III, 58.
 See also Blunden, H.
 Morel, A. See Berard, L.
 Moreland, C. F. See Flint, L. H.
 Moreland, F. B. See Marron, T. U.
 Morelli, A., and D'Ambrosio, L., vitamin-B₁ and carbohydrate metabolism, III, 50.
 and Greco, D., effect of nicotinic acid on blood-sugar, III, 287.
 Morelli, E., and Dansi, A., serology of carcinogenic substances, III, 456.
 Morgal, P. W. See Petering, H. G.
 Morgan, A. F., and Haynes, E. G., vitamin-B₁ content of human milk as affected by ingestion of thiamin chloride, III, 322.
 Shimotori, N., and Hendricks, J. B., progress of hypervitaminosis-D₂ and -D₃ and recovery in rats, as affected by dietary calcium, phosphorus, and vitamin-A, III, 752.
 and Simms, H. D., adrenal atrophy and senescence produced by vitamin[-B₁₂] deficiency, III, 51. Greying of fur and other disturbances in several species due to a vitamin deficiency, III, 516.
 Morgan, A. R., and Bowden, S. T., molecular state of inorganic liquids, I, 152.
 See also Bowden, S. T.
 Morgan, D. R. See Moon, V. H.
 Morgan, F. See Collie, C. H.
 Morgan, H. E., and Dow, R. B., effects of pressure and temperature on viscosity of monosubstituted toluenes, I, 389.
 Morgan, H. R., preparation of antigenic material inducing leucopenia from *E. typhosus* cultured in a synthetic medium, III, 772.
 Morgan, I. M. See Olitsky, P. K., and Smith, L. W.
 Morgan, J. See Bohn, J. L.
 Morgan, J. R. E., and Detweiler, H. K., hæmatological study of 76 pneumonia cases treated with sulphapyridine, including a fatal case of agranulocytosis, III, 244.
 Morgan, K. Z. See Nielsen, W. M.
 Morgan, M. N. See Cook, E. S.
 Morgan, M. W., *jun.*, and Olmsted, J. M. D., response of human lens to a sudden startling stimulus, III, 397.
 Olmsted, J. M. D., and Watrous, W. G., sympathetic action in accommodation for far vision, III, 573.
 Morgan, P. W. See Wolfrott, M. L.
 Morgan, R. H. See Hirsch, E. F.
 Morgan, S. O. See White, A. H.
 Morgan, W. T. J., and Partridge, S. M., bacterial antigens, III, 75. Immunochemistry. IV. Fractionation and nature of antigenic material isolated from *Bact. dysenteriae* (Shiga), III, 452.
 See also Jolles, Z. E., and Partridge, S. M.
 Morgareidge, K., and Manly, M. L., simultaneous appearance of a positive line test and radioactive phosphate deposition in the rachitic rat metaphysis, III, 324.
 See also O'Brien, B.
 Morgulis, N. D., study of the surface structure of thoriated tungsten by means of an ionic microscope, I, 276.
 and Bernadiner, M. P., neutralisation and ionisation of cesium and potassium at thoriated tungsten, I, 50.
 Morgulis, S., and Richards, C. E., nutritional muscle dystrophy and sex hormones, III, 888.
 Mori, F. See Ogata, A.
 Mori, K., Miwa, M., and Yamashita, H., action of ionising rays on sea-urchin. III. Recovery phenomenon in effects of β -rays on unfertilised eggs and sperm, III, 69.
 See also Miwa, M.
 Mori, Kasuo, and Nakahara, W., effect of liverfeeding on production of malignant tumours by injections of carcinogenic substances, III, 505.
 See also Nakahara, W.
 Mori, T. See Takahashi, Kumao.
 Moriber, L. See Burstein, E.
 Moricard, R. See Gothié, S.
 Morice, (Miss) I. M., and Simpson, J. C. E., triterpene group. VII. Minor triterpenoid constituents of *Manila elemi* resin, II, 284.
 Morigami, S., action of dimethylaminoazobenzene on tissues, III, 44. Influence of rice-germ oil on growth and histology of normal and tumour tissue in tissue culture, III, 141.
 and Kasiwabara, N., fine structure of cytoplasm of hepatoma cells, III, 912.
 and Nishimura, I., aniline bladder tumours, III, 669.
 Morii, S., and Makino, K., synthesis of adermine, II, 140.
 Morikawa, H. See Inui, S.
 Morimoto, K. See Ogata, A.
 Morin, C. See Langlois, J.
 Morin, F., vascularisation of hypophysis and neighbouring nervous tissues, III, 371. Vascular relationship between pituitary and hypothalamus, III, 402.
 and Bonivento, E., nerve supply of pericardium, III, 636.
 Morin, G., reaction of intestine to adrenaline as function of conditions of administration, III, 579.
 See also Hermann, H., and Mouriquand, G.
 Morino, Y. See Mizushima, S.
 Morison, B. R. See Renshaw, B.
 Morison, D. M., routes of absorption in total urethral obstruction, III, 223, 586.
 Morison, J. E., extroversion of primitive hind gut, III, 874.
 Morison, R. S., effects of adrenaline and nerve stimulation on mechanical and electric responses of uterine muscle, III, 660.
 Morita, N., catalytic isotope exchange of gaseous oxygen. V. Sorption of oxygen by manganic oxide and the exchange reaction of gaseous oxygen and manganic oxide. VI. Exchange reaction of oxygen atoms between oxygen and water vapour at surfaces of oxides of the second, fourth, and sixth groups of the periodic system. VII. Mechanism of exchange of oxygen atoms between oxygen and water vapour on the surface of calcium oxide. VIII. Effect of time of contact of reactive gas mixture with catalyst on rate of exchange reaction. IX. Preparation and catalytic activity of catalyst. X. Exchange of oxygen atoms between oxygen and water vapour on surface of aluminium oxide, I, 157, 225, 262, 365, 392, 443.
 Moriaki, D. See Nishina, Y.
 Moriya, T., internal binding energy and constitution of glass. I. Viscosity of glass at temperatures near the transformation point. II. Viscosity and internal binding energy of soda-silica glasses. III. Viscosity and internal binding energy of Na₂O-B₂O₃-SiO₂ glasses. IV. Internal binding energy of glass and the glassy state, I, 106, 155.
 Morley, J., Yates, H. B., and Ogilvie, W. H., discussion on diagnosis and treatment of acute pancreatitis, III, 37.
 Morlock, C. G., and Alvarez, W. C., liver disease and migraine, III, 812.
 Moro, M., and Torrini, A., relationship between mucin and free acid in normal and pathological gastric juice, III, 741.
 Moros, N. See Messinger, E.
 Morozov, A. A., and Pamfilov, A. V., change in viscosity of cellulose nitrate solutions. VI, I, 24.
 Morozov, A. S., effect of temperature on the reversible activity of invertase in forage grasses as dependent on their cold- and heat-resistance, III, 79. Carbohydrate storage by forage grasses, III, 81. Synthetic and hydrolytic action of invertase at various hours of the day in *Bromus inermis*, Leyss., III, 609. Influence of temperature in various phases on reversible action of invertase in the fodder grasses as related to their resistance to heat, III, 609.
 Morozowski, S., hyperfine structure of the quadrupole line 2815 Å. and other lines of ionised mercury, I, 137.
 Morrell, E. See Williams, D. E.
 Morrell, J. C. See Egloff, G.
 Morrell, R. S., and Phillips, E. O., oxidation of drying oils and cognate substances. VI. Properties of the ketol, peroxide, and oxido-grouping, including those of some resins, II, 323.
 Morris, C. T. See Morris, D. L.
 Morris, D. L., and Morris, C. T., glycogen in sweet maize, III, 273.
 Morris, G., electrification of powders by free fall, I, 58.
 Morris, H. J. See Laug, E. P.
 Morris, H. P., age and the lead content of human bones, III, 420.
 Morris, M. L., Allison, J. B., and Green, D. F., blood cytology of normal dog, III, 375.

- Morris, M. L., and Russell, W. C., vitamins and vitamin preparations in small animal practice, III, 672.
See also Russell, W. C.
- Morris, N., and Stevenson, M. M., vitamins D_2 and D_3 in infantile rickets, III, 236.
- Morris, S. G., synthetic α -tocopherol and nutritional muscular dystrophy, III, 197.
- Morris, W. M., Sage, B. H., and Lacey, W. N., volumetric behaviour of isobutane, I, 65.
- Morrish, R. W. D. See Maxted, E. B.
- Morrison, D. B. See Hisey, A.
- Morrison, J. L., and Roberts, J. K., studying adsorption of gases at very low pressures and properties of adsorbed films of oxygen on tungsten, I, 68. Kinetics of formation of oxygen films on tungsten, I, 68.
- Morrison, L. M., and Swalm, W. A., new effective parasiticide in giardiasis, III, 247. Gastro-intestinal tract and cardiac symptoms, III, 292. Simple accurate method for determination of bile salts in urine and bile, III, 620.
See also Swalm, W. A.
- Morrison, M., and Samwick, A. A., clinico-haematologic evaluation of bone marrow biopsies, III, 181. Restoration of overstained Wright films and new method of staining blood smears, III, 838.
- Samwick, A. A., and Rubinstein, R. I., congenital leukæmia with "chloroma," III, 628.
- Morrison, P., and Schiff, L. I., radiative K capture, I, 338.
See also Cooper, E. P., and Dancoff, S. M.
- Morrison, S., gastric secretory functions, III, 35.
and Feldman, M., effect of thyroid on motility of gastro-intestinal tract, III, 218. Effect of atropine on gastro-intestinal tract following thyroid medication, III, 923.
- Feldman, M., Krantz, J. C., jun., and Beck, F. F., experimental study of pH and chemistry of bile, its effect on stones, and therapeutic application of ox bile in gall-bladder disease, III, 136.
- Morrison, T. H. See Feldman, M.
- Morrow, A. S., allergic reactions to an antigen from the chigger (*Trombiculum irritans*), III, 614.
- Morsan, B., determination of manganese as pyrophosphate, I, 270.
- Morse, A. H., [experiments on reproductive organs in female monkeys], III, 659.
See also Van Wegenen, G.
- Morse, M., and Schlutz, F. W., blood serum changes in dog during recovery from exercise on treadmill, III, 562.
- Morse, R. S., and Bowie, R. M., ionisation gauge, I, 235.
- Mortensen, K. N. See Docking, A. R.
- Mortenson, C. W., and Spielman, M. A., condensation of α -methoxystyrene with halogen compounds, II, 309.
- Morton, A. A., substitute for laboratory oil baths, I, 83.
and Massengale, J. T., condensations by sodium. XV. Reactions of disodium compounds with ethylidene and methylene chlorides, II, 62.
- Massengale, J. T., and Richardson, G. M., condensations by sodium. XVII. Formation of triphenylene, II, 74.
- Morton, A. A., and Richardson, G. M., condensations by sodium. XVI. Formation of decane in the Wurtz reaction. XVIII. Possible conversion of sodium amyl into disodium amyldene, II, 62.
- Morton, F., and Nussey, A. M., blood-urea and urea clearance, III, 667.
- Morton, G. A., and Ramberg, E. G., point projector electron microscope, I, 41.
- Morton, H. E., construction of inexpensive power washer and the designing of economical and efficient brushes for cleaning of laboratory glassware, III, 176.
- Morton, J. J., and Mider, G. B., effect of petroleum ether extract of mouse carcasses as solvent in production of sarcoma, III, 44. Effect of petroleum ether extract of mouse carcasses on skin tumour production in C 57 black mice, III, 588.
See also Mider, G. B.
- Morton, J. W. See Weigert, F.
- Morton, M. C., and Tainter, M. L., sympathomimetic amines and perfused blood vessels, III, 709.
See also Newman, H. W.
- Morton, R. A., constitution and physiological significance of carotene and allied pigments, III, 512.
and Sawires, Z., rottlerin. VI. Spectrographic study of rottlerin and its derivatives, I, 402.
and Stubbs, A. L., absorption spectra of hydroxy-aldehydes, hydroxy-ketones, and their methyl ethers, I, 429.
See also Lovern, J. A.
- Moruzzi, Giovanni, Moruzzi, Giuseppe, and Bartoli, M. A., Pasteur reaction in erythrocytes, III, 5.
- Moruzzi, Giuseppe, palaeocerebellar inhibition of vasomotor and respiratory carotid sinus reflexes, III, 483. Inhibition and enhancement of activity of pyramidal system produced by faradic stimulation of palaeocerebellum, III, 844.
See also Adrian, E. D., Bremer, F., and Moruzzi, Giovanni.
- Moschinski, G., treatment of patients with heart disease with fruit juice, III, 601. Affections of the blood vessels in steel casting workers, III, 865.
- Mosehkov, B. S., and Smirnova, M. I., grafting as a method of changing alkaloid content in plants, III, 82.
- Moschkowitz, L., and Sprinz, H., carcinoma of oesophagus in antelope, III, 506.
- Mosco, D., respiratory effect of lobeline; [action of carotid body], III, 105.
- Moseley, H. F., supraspinatus tendon, III, 277.
- Mosenthal, H. O., medicinal therapy of hypertension, III, 711.
and Mark, M. F., prolonged use of protamine-zinc-insulin, III, 29.
- Moses, P. A., Raman spectra of fused nitrates, I, 57.
- Mosettig, E., morphimethine series, II, 333.
See also Krueger, J., and Stuart, A. H.
- Mosher, L. M. See Bunker, J. W. M., and Harris, R. S.
- Mosher, W. A., dehydration of tertiary alcohols containing the cyclohexane ring, II, 169.
- Mosinger, M., and Fiorentini, H., gonadotropic function in dementia præcox, III, 403.
- Mosinger, M., Ollivier, H., and Bonteux, Y., reducing granules in neurones of peripheral autonomic system, III, 298.
See also Roussay, G.
- Moskowitz, S., Siegel, J., and Burke, W. J., industrial air analysis, III, 683.
- Mosley, V. M. See Maxwell, L. R.
- Mosonyi, J., obesity in hypophysectomised dogs, III, 847.
- Moss, A. R., and Schoenheimer, R., conversion of phenylalanine into tyrosine in rats, III, 917.
- Moss, F. K. See Luckiesh, M.
- Moss, J. M., protection against rabies; effect of frequency of dosage of vaccine on immunity, III, 614.
- Mossini, A., organic salts of sulphanilamide and sulphanilysulphanildimethylamide, II, 11. Acyl derivatives of sulphanilamide in presence of hydrogen chloride, III, 59.
- Mossman, H. W., and Hisaw, F. L., foetal membranes of the pocket gopher. I. From unfertilised tubal egg to beginning of allantois, III, 622.
- Most, H., and Jolliffe, N., treatment of *Falciparum* malaria of drug addicts, III, 922.
- Mosto, D., and Dickmann, C. H., cranial meningiomas, III, 113.
- Motel, W. G. See Necheles, H.
- Mothes, K., sulphur metabolism of plants. II, III, 940.
- Motokawa, K., action currents and polar excitability of frog's skin in direct electrical stimulation, III, 481. Quasi-periodic oscillations of skin potential and excitability after faradisation of the skin nerves, III, 481. Summation in neurocutaneous system, III, 481. Quantitative relationship between resting and action currents of frog's skin, III, 481. Action currents of frog's skin as quantitative indicators in graded stimulation, III, 481. Summation and chemical transmission at endings of autonomic skin nerves, III, 800.
- Motschalov, K. I., application of the method of sections to study of equilibrium in ternary systems with solid phases, I, 217.
- Mott, N. F., theory of formation of protective oxide films on metals. II, I, 209. Oxidation of metals and the formation of protective films, I, 369.
and Nabarro, F. R. N., estimate of degree of precipitation-hardening [in alloys], I, 250.
- Mottern, H. H., and Cole, H. L., enzymic preparation of d -galacturonic acid, III, 72.
- Mottram, J. C., increase in rate of growth of paramecium subjected to the blastogenic hydrocarbon 3:4-benzpyrene, III, 44. Photodynamic activity of tissues of mice treated with 3:4-benzpyrene, III, 226. 3:4-Benzpyrene, paramecium, and the production of tumours, III, 422.
See also Doniach, I., and Weigert, F.
- Motz, L., and Schwinger, J., neutron-deuteron scattering cross-section, I, 144. Scattering of thermal neutrons by deuterons, I, 338.
See also Goldsmith, H. H.
- Motzoc, M. D. See Bălănescu, G.
- Moubis, J. H. A. See Penning, F. M.
- Moullin, E. B., effect of space-charge in the magnetron, I, 88.

- Mountain, E. D., and Frankel, J. J., cherts in the Karroo system, I, 396.
- Mountain, G. E. See Gardner, J. W.
- Moureaux, P., and Lambert, J., iso-agglutinin anti-M present in human blood, III, 94.
- Moureu, H., and Wetroff, G., magnesium phosphonitramidate; existence of compounds analogous to cyanamides in the phosphorus series, I, 264.
- Mourgue, M. See Dumazert, C., and Roche, J.
- Mouriquand, G., Dauvergne, M., and Edel, V., preventive vitaminisation, III, 324.
- Dauvergne, M., Tête, H., and Edel, V., osteophytes due to chronic C-avitaminosis, III, 595.
- Morin, G., and Czerschowska, R., thyroid extract as factor in development of experimental beri-beri, III, 232.
- Mourouy, A., capacity of amphibian iris for lens formation, III, 552.
- Mousel, L. H., and Seldon, T. H., gas machine for anaesthetisation of small laboratory animals, III, 252.
- Mousseron, M., and Huc, H., modifications in the lipoalbumin and lipoglobulin complexes during ageing of serum, III, 286.
- Moutte, M. See Roche, J.
- Mouzon, J. C. See Park, R. D.
- Moxon, A. L., toxicity of selenium derivatives of oystine and other organic compounds, III, 762.
- and Dubois, K. P., influence of arsenic and other elements on toxicity of seleniferous grains, III, 443.
- Schaeffer, A. E., Lardy, H. A., Dubois, K. P., and Olson, O. E., increasing rate of excretion of selenium from selenised animals by administration of "p-bromobenzene," III, 443.
- See also Dubois, K. P., and Foley, W. E.
- Moyer, A. W. See Du Vigneaud, V.
- Moyer, E. Z. See Moyer, L. S.
- Moyer, L. S., electrokinetic aspects of surface chemistry. VIII. Composition of surface film on fat droplets in cream, I, 212. Use of electrophoresis in elucidation of biological problems, III, 259.
- and Gorin, M. H., electrokinetic aspects of surface chemistry. IX. Electric mobilities of quartz and collodion particles in mixtures of horse serum and serum-proteins in relation to the mechanism of film formation, I, 292.
- and Moyer, E. Z., electrokinetic aspects of surface chemistry. VI. Interaction of gelatin with caseinogen and ovalbumin at surfaces. VII. Electrophoretic behaviour of microscopic particles in presence of horse, human, or rabbit serum, III, 343.
- See also Gorin, M. H.
- Moynier, R. See Binet, L.
- Mozingo, R. See Marvel, C. S.
- Mozziconacci, P. See May, E.
- Mrazec, L., salinity of the miocene clays of the Transylvanian basin, I, 182.
- Mrowka, B. See Hund, F.
- Mrozowski, S., nuclear isotope shift in the spectra of HgH^+ and HgD^+ , I, 400.
- Muck, O., action of α -rays of polonium on blood vessel innervation in man as shown by the "adrenaline and sound test," III, 446.
- Mucke, K. See Hinsberg, K.
- Mudd, S. See Smith, L. W.
- Mudrova, A. A., isolation of *Bacillus alopecuri*, Nogt., III, 362.
- Mudrow, L. See Kikuth, W.
- Mühlbock, O., actions of diethylstilboestrol, III, 129. Action of oestradiol benzoate on sexual activity of male rats treated with testosterone propionate, III, 651. Intravaginal administration of oestrogenic substances in ovariectomised mice, III, 654. Action of female sex hormones [oestrogens] on cock's comb, III, 654. Free and combined oestrogenic substances in human liquor folliculi, III, 654. Antagonism between female and male sex hormones on capon's comb, III, 734.
- See also Dingemans, E.
- Mueller, A., chemical studies on icteric urine, III, 667.
- Müller, Alex., torsional flexibility of aliphatic chain molecules, I, 148.
- See also Knaggs, I. E.
- Müller, Alexander, and Varga, I., oxidative fission of the polyhydroxy side-chains in the sugar condensation products of ethyl acetoacetate and o-phenylenediamine, II, 104.
- Müller, Arno, ionene, II, 123.
- Müller, A. H., effect of nicotinamide on blood count, III, 181. Action of vitamin-C, -P, -B₁, and -B₂ in man on thrombocytes, III, 185. Action of vitamin-C, -P, -B₁, and -B₂ in man on leucocytes and reticulocytes, III, 185.
- Müller, A. Herbert. See Steinkopf, W.
- Mueller, A. J., Kemmerer, K. S., Cox, W. M., jun., and Barnes, S. T., effect of casein and casein digest on growth and serum-protein regeneration, III, 748.
- See also Cox, W. M., jun.
- Müller, C., angina pectoris in xanthomatosis, III, 98. Effect of hypophysectomy on threshold dose of male sex hormone in castrated rats, III, 216.
- Müller, Erich, electrolytic reduction of aqueous chromic acid solutions, I, 325.
- Müller, Ernst, and Stumpf, W., determination of iodide in mineral waters in presence of bromide and large amounts of chloride, I, 173.
- Müller, Eugen, magneto-chemical investigation of organic substances. XVII. True carbon diradical with "para" placed "free valencies," II, 122.
- and Tietz, E., magneto-chemical investigation of organic substances. XVIII. True diradical with p-"free valencies," II, 302.
- Müller, E. A., influence of inertia on maximum work in cycling, III, 340. Maximum work and recovery during oxygen deficiency, III, 340. Action of sinusoidal vertical vibrations on sitting and standing man, III, 342. Continuous infusion, III, 618.
- See also Graf, O.
- Mueller, E. F., dropping electrode with a constant head of mercury, I, 272.
- Müller, E. W., variation of field emission with direction as an example of Bragg interferences in the metal lattice, I, 139.
- Müller, F., scientific and technical importance of aerosols, I, 356.
- See also Meyer, E.
- Müller, H. See Brigl, P.
- Mueller, Hans, theory of electrophoretic migration, I, 72. Properties of Rochelle salt. I.—III, I, 287, 433.
- Müller, H. G., recrystallisation texture of face-centred iron-nickel-copper alloys, I, 107.
- Müller, H. O. See Radczewski, O. E.
- Mueller, J. H., synthetic medium for cultivation of *Corynebacterium diphtheriae*, III, 935.
- and Miller, P. A., tetanus toxin production on a simplified medium, III, 613.
- Müller, K., oil bodies of liverworts, III, 548.
- Müller, L. R., bioelectrical phenomena in cerebrum, III, 637.
- Müller, M., electrical shock therapy of psychosis, III, 637.
- Müller, O., physiology and pathology of capillaries in man, III, 884.
- Müller, O. H., oxidation-reduction potentials measured with the dropping mercury electrode. III. Polarographic study of quinhydrone in buffered and unbuffered solutions, I, 442.
- and Nickel, W. F., pH of systemic blood in normal and hypertensive dogs determined by means of a syringe type glass electrode, III, 473.
- Müller, P., coronary circulation disturbances in aortic stenosis, III, 841.
- See also Goldberg, M. W.
- Müller, P. O., distance between energy levels of the atomic nucleus, I, 92.
- Müller, P. R., perfusion apparatus for studies of metabolism of isolated organs, III, 274.
- Müller, R. See Klein, W., and Meier, R.
- Mueller, Werner. See Richardson, John R.
- Müller, Wilhelm, poisoning with small doses of atropine, III, 253.
- Müller-Bonn, H., analeptic action of pervitin, III, 252.
- Mueller-Cunradi, M. See Thomas, R. M.
- Müller-Strobel, J., statistics of space charges in "glide sparks," [sparks along dielectric surfaces]. I. Elementary processes leading to most probable [potential] distribution, I, 425.
- Münch, H. See Hettche, H. O.
- Muench, O. B., Pieds des Monts uraninite, I, 47.
- Muether, R. O., use of histamine in rheumatoid arthritis, III, 682.
- Mufson, I. See Mulinos, M. G.
- Muhlenbach, V., rôle of saliva bacteria in the Dold-Weigmann inhibition phenomenon, III, 169.
- Muir, K. B., Stenhouse, E., and Becker, S. W., action of sulphur-containing compounds in arsenical and mercurial poisoning, III, 527.
- Mukerji, B., and Ghose, R., elimination of administered chloral hydrate in urine as test for liver function, III, 40. Diet and detoxication, III, 57. Blood clearance of free chloral in normal and liver-damaged dogs, III, 135. Elimination of conjugated glucuronic acid as measure of hepatic efficiency, III, 812. Urinary clearance of free chloral in normal and liver-damaged dogs and possibility of using it as test for liver function, III, 812.
- See also Smith, R. G.
- Mukherjee, A. See Qudrat-i-Khuda, M.
- Mukherjee, A. N. See Roy, S. K.
- Mukherjee, H. See Mitter, P. C.
- Mukherjee, J. N., and Sen Gupta, N. C., formation of aggregates and structures in dilute solutions of hydrogen bentonites, I, 357.
- Mukherjee, L. N. See King, Alexander.
- Mukherjee, S., and Datta, N. P., electrochemical properties of stearic acid hydrosol. I, I, 112.

- Mukherji, M. M., correlation of the Satpukuria seam in the Raniganj coal-field, I, 304.
- Mukherji, S. P. See Lal, R. B.
- Mukhopadhyay, S. L. See Clutterbuck, P. W.
- Mukimov, S., double decomposition in absence of a solvent. XLVII. Fusion diagrams of ternary systems of fluorides, chlorides, and sulphates of potassium and sodium, I, 413.
- Mulartschuk, M. D., effect of protein content of diet on activity of tissue-proteinases, III, 72.
- Mulder, D. See Nauta, W. T.
- Mulfinger, W. See Köster, W.
- Mulherin, P. A., ataxia due to bite of American dog tick (*Dermacentor variabilis*, Say), III, 394.
- Mulbolland, S. W., hypertension—the problem, the study, the future, III, 793.
- Mulinos, M. G., and Pomerantz, L., pseudo-hypophysectomy: a condition resembling hypophysectomy produced by malnutrition, III, 856.
- and Shulman, I., effects of cigarette smoking and deep breathing on peripheral vascular system, III, 565.
- Shulman, I., and Mufson, I., treatment of Raynaud's disease with papaverine intravenously, III, 193.
- See also Leslie, A.
- Muller, A. E. See Skinner, C. E.
- Muller, H. J., analysis of process of structural changes in chromosomes of *Drosophila*, III, 763.
- and Pontecorvo, G., recombinants between *Drosophila* species the F_1 hybrids of which are sterile, III, 835.
- Muller, P., determination of calcium in serum, III, 883.
- See also Govaerts, P.
- Muller, S., and Cobb, J. W., steam-carbon complex, I, 171.
- Mulliken, B. See Kneeland, Y., jun.
- Mulliken, R. S., electronic states of diatomic carbon, and the carbon-carbon bond, I, 6. Halogen molecule spectra. II. Interval relations and relative intensities in the long wavelength spectra, I, 183. Intensities of molecular electronic spectra. IX. Calculations on the long-wave-length halogen spectra. X. Calculations on mixed-halogen, hydrogen halide, alkyl halide, and hydroxyl spectra, I, 198, 285.
- See also Aston, F. W., and McMurry, H. L.
- Mullin, J. H., and Elliott, F., parathormone [A.T.10] shock-treatment in post-operative tetany, III, 497.
- Mullins, L., and Rodgers, J. W., investigation of cold-worked polycrystalline α -iron, I, 387.
- Mullins, L. J., radioactive isotopes in physiology and biology, III, 240. Effect of radiation from radioactive indicators on penetration of ions into *Nitella*, III, 259.
- and Brooks, S. C., radioactive ion exchanges in living protoplasm, III, 240.
- Mulrooney, R. E., cytology of gastric contents, III, 811.
- Mulwani, B. T., colorimetric micro-determination of sodium, I, 299.
- Mumm, O., mechanism of ester hydrolysis and ester formation, II, 63.
- Mumm, O., Hinz, H., and Diederichsen, J., 2-methyl-1-benzthiazolonemethide and 1:3:3-trimethyl-2-indolinomemethide usually designated "Fischer's base," II, 143.
- Mundell, B. J. See Mussey, R. D.
- Mundell, D. See Mendel, B.
- Mundie, L. G. See Herzberg, G.
- Mundt, E. See Grosse-Broekhoff, F.
- Munier, J. H., Bearden, J. A., and Shaw, C. H., principal *M*-series emission lines of tungsten and the *K* absorption of magnesium and aluminium, I, 424.
- Munje, R. H. See Limaye, D. B.
- Munk, (Miss) I. See Baker, W.
- Munks, B. See Barnes, D. J.
- Muñoz, J. M., Braun-Menéndez, E., Fasciolo, J. C., and Leloir, L. F., hypertensin: substance causing renal hypertension, III, 293.
- See also Braun-Menéndez, E., and Mascheroni, H. A.
- Munro, A. F., nitrogen excretion and arginase activity during amphibian development, III, 149.
- Munro, F. L. See Shay, II.
- Munro, H. N. See Cuthbertson, D. P.
- Munro, L. A., and Pearce, J. A., time of set of silica gels. IV. Effect of aldehydes and sugars over a pH range, I, 212.
- Munro, S. S., and Kosin, I. L., relative potency of several estrogenic compounds tested on chicks of both sexes, III, 903.
- Munroe, D. S. See Strong, G. F.
- Munsell, D. W. See Slaughter, D.
- Muntner, S., action of β -phenylalkylamines in nocturnal enuresis, III, 251.
- Muntwyler, E., Mellors, R. C., and Mautz, F. R., electrolyte and water equilibria in the dog. I. Equilibria in the blood in adrenal insufficiency, III, 745.
- Mellors, R. C., Mautz, F. R., and Mangun, G. H., electrolyte and water equilibria in the dog. II. Electrolyte and water exchange between skeletal muscle and blood in adrenal insufficiency. III. Exchange between tendon and blood, III, 745.
- Muraa, M. See Yaoi, H.
- Murakami, O., influence of creatinine on metabolism of carbohydrate, III, 597. Influence of ascorbic acid on liver function and mutual relation between vitamins- B_1 and - C . I. Influence of ascorbic acid on pigment-excreting function of liver. II. Sodium santonium-managing function of liver. III. Indole-detoxifying function of liver. IV. Relationship between vitamins- B_1 and - C regarding detoxifying function of liver for indole. V. Effect of ascorbic acid on peripheral blood vessels. VI. Relationship between vitamins- B_1 and - C regarding action on blood vessels, III, 674.
- Murakami, R., effect of monochromatic light on action of enzymes. XXII, XXIII. Effect of absorbed visible light of the same intensity. XXIV, XXV. XXVI.—XXIX. Ultra-violet light. XXX.—XXXIII. Infra-red rays, III, 160, 342. Influence of monochromatic light on action of enzymes; influence on yeast enzymes, III, 685.
- Murakami, Susumu, constitution of verbascose, a new pentasaccharide, II, 155.
- Murakami, Syosuke. See Katagiri, H.
- Murányi, L. von, gastric secretion in diseases of the gall bladder, III, 906.
- Murata, K. J., volcanic ash as a source of silica for the silicification of wood, I, 396.
- Muratori, F. See Ferrannini, A.
- Muratori, G., blood vessels in Peyer's patches in man, III, 180. Combined explants of pronephros mesoderm and ventral ectoderm at beginning of neurulation in *Triton alpestris*, III, 372.
- Murdia, M. S., effect of 3-indolylacetic and phenylacetic acid on growth of Saprolegniaceae, III, 82.
- Murdoch, F. M. See Miller, W. T.
- Murdoch, J., miargyrite crystals from Randsburg, California, I, 181.
- Murer, H. K., and Crandall, L. A., jun., preparation of borneol glucuronide, II, 183.
- See also McCulloch, E. C.
- Murgatroyd, F., immunisation against human rickettsial diseases, III, 938.
- Murgier, M., and Darmon, M. E., action of sodium borate on glucose and xylose, II, 119.
- Murgulescu, I. G., and Drăgulescu, C., departure of the equivalence volume from the inflexion volume in potentiometric titrations, I, 230.
- Murless, B. C. See Bishop, P. M. F.
- Murlin, J. See Sealock, R. R.
- Murlin, J. R., Gibbs, C. B. F., Romansky, M. J., Steinhause, T. B., and Truax, F. L., effectiveness of peroral insulin in human diabetes, III, 898.
- Kochakian, C. D., Spurr, C. L., and Harvey, R. A., androgens and tumour growth, III, 229. Influence of androgens on growth and metastasis of Brown-Pearce epithelioma, III, 229.
- See also Young, L. E.
- Murphy, E. E. See Woodbury, R. A.
- Murphy, B. See McNamara, W. L.
- Murphy, E. J., Bright, W. C., Whitaker, M. D., Korff, S. A., and Clarke, E. T., comparative efficiencies of radioactive neutron sources, I, 338.
- See also Whitaker, M. D.
- Murphy, E. L. See Langworthy, O. R.
- Murphy, G. M., Coriolis perturbations in the spectra of silane and germane, I, 94.
- Murphy, H. C., effect of crown and stem rusts on relative cold-resistance of varieties and selections of oats, III, 366.
- Murphy, H. M. See Schindler, R.
- Murphy, J. B. See MacFadyen, D. A.
- Murphy, J. N., Cook, E. B., and Bohls, S. W., cases of diphtheria following one dose of alum-precipitated toxoid, III, 770.
- Murphy, K. M. See Emge, L. A.
- Murray, A. E. See Knauss, H. P.
- Murray, E. G., allergic reactions of female genital tract, III, 808.
- Murray, G., and MacKenzie, R., effect of heparin on portal thrombosis: its use in mesenteric thrombosis and following splenectomy, III, 186.
- Murray, J. W. See Osterhout, W. J. V.
- Murray, M. J., and Cleveland, F. F., Raman spectra of acetylenes. II. Displacement and depolarisation factors for phenylacetylene and derivatives of the type $C_6H_5C\equiv CR$, I, 96. Infra-red absorption spectrum of phenylmethylacetylene, I, 194.
- See also Cleveland, F. F.
- Murray, M. M., caries and sugar: crude and refined sugars compared in respect of calcium and phosphate content, III, 49.
- Glock, G. E., and Lowater, F., chemical and spectrographic determination of iron in tooth material, III, 42.

- Murray, M. R., Stout, A. P., and Bradley, C. F., Schwann cell versus fibroblast as origin of specific nerve sheath tumour; observations on normal nerve sheaths and neurilemmas *in vitro*, III, 568.
- Murray, T. F., jun., and Kenyon, W. O., rates of formation of sulphoaliphatic acids, I, 326.
- Murray, W. S., and Little, C. C., chromosomal and extrachromosomal influence in relation to incidence of mammary tumours in mice, III, 227.
- Murrell, E. B. M., and Smith, C. L., transmutation of sodium by deuterons, I, 141.
- Murill, W. A., Block, W. D., and Newburgh, L. H., analyses of urinary protein and various fractions of human and pig serum-protein, III, 619.
- Murti, G. V. L. N., and Seshadri, T. R., Raman effect and chemical constitution; influence of constitutive and other factors on the double bonds in organic compounds. II. Effect of the phenyl group on the carbonyl bond in esters. III. Effect of the benzyl group on the C:O bond in esters. IV. Frequency of the ethylenic double linking in unsaturated carbonyl compounds, I, 57, 195, 346.
- Murti, K. S. See Hilditch, T. P.
- Murti, P. B. R., and Seshadri, T. R., chemical composition of Indian senna leaves (*Cassia angustifolia*), III, 273.
- Murty, V. V. S. See Rau, Y. V. S.
- Musajo, L., anthocyanin of olives, III, 462.
- and Minchilli, M., pigment of spines of sea urchin (*Paracentrotus lividus*), III, 421.
- Muschart, J., effect of changes in pressure and volume on work of the isolated frog bladder, III, 223.
- Musicant, L., and Kaszuba, F. J., identification of propionic acid in presence of acetic and butyric acids, II, 4.
- Musick, V. H., 10 cases of pellagra treated with nicotinic acid, III, 145.
- Musil, A., activity theory of non-electrolytes. I. General thermodynamic basis. II. Energy of reciprocal action and entropy of mixing, I, 163.
- Muskett, A. E. See Cairns, H.
- Muskovitz, A. N. See Sokolov, M.
- Mussey, R. D., and Mundell, B. J., retinal examinations guide in management of toxic hypertensive syndrome of pregnancy, III, 213.
- Mustafa, K., red cell size in various types of anaemia, III, 181.
- Mustard, R. A. See Jaques, L. B.
- Musulini, R. R. See King, C. G.
- Musumeci, S. See Cannava, A.
- Mutch, J. R. See Thomson, A. M.
- Muthanna, M. C., and Ahmad, B., vitamin-C content of germinated cereals, III, 858.
- Muthanna, M. S. See Guha, P. C.
- Muto, T., ferromagnetism of impurity semi-conductors, I, 12.
- Mutscheller, A. See Cipollaro, A. C.
- Mutschnik, S., and Vourgaft, M., carcinolytic property of serum and of organ extracts in rats resistant to Jensen sarcoma, III, 94.
- Mutzenbecher, P. von, formation of thyroxine from di-iodotyrosine, III, 406.
- Muus, J., Craig, F. N., and Salter, W. T., artificial benignancy of neoplasm. III. Metabolism of sarcoma 180 growing at different rates, III, 228.
- and Lebel, H., complex calcium citrate, I, 359.
- Myant, N. B., and Pratt, C. L. G., anti-[thrombo]kinase action of cobra venom, III, 378.
- Myer, R. See Allison, S. T.
- Myers, F. E., Huntoon, R. D., Shull, C. G., and Crenshaw, C. M., search for a short-range group of protons in the D-D reaction, I, 51.
- Myers, G. S. See Hill, W. T.
- Myers, J. See McAlister, E. D.
- Myers, J. A. See Tortone, J.
- Myers, P. B., and Rouse, A. H., peetimates, with special reference to nickel pectinate, and their therapeutic value, III, 445.
- Myers, V. C., chemical changes in blood and their clinical significance, III, 187.
- Free, A. H., and Beams, A. J., variations in enzymic activity of duodenal contents, III, 38.
- See also Alburn, H. E., Corsaro, J. F., and Mangun, G. H.
- Myerson, A., Rinkel, M., Loman, J., and Dameshek, W., effect of furfuryl-trimethylammonium iodide on various autonomic functions in man, III, 523.
- See also Alexander, L., Cohen, B., Loman, J., and Schube, P. G.
- Myerson, P. G. See Dameshek, W.
- Myerson, S. See Diamond, J. S.
- Mygind, S. H., and Dederding, D., pathogenesis of Menière's disease and of kindred conditions in ear and rest of body, III, 27.
- Myhrman, G., and Tomenius, J., histamine in human faeces, III, 39.
- Mylon, E. See Thomas, R. M.
- Myrbäck, K., oxidation of aldoses by hypiodite. V. VI. Oxidation of glucosone (2-ketoglucose) by hypiodite. VII. Glucosamine and N-acetylglucosamine, I, 77; II, 67, 208.
- Fermentation of cellobiose, III, 687.
- and Örtenblad, B., determination of amylase in barley, III, 164.
- See also Carlström, B.
- N.
- Nabarro, D., and Edward, D. G. F., pathogenicity of *Bacterium alkalescens*, III, 168.
- Nabarro, F. R. N., influence of elastic strain on shape of particles segregating in an alloy, I, 250. Strains produced by precipitation in alloys, I, 389.
- See also Frölich, H., and Mott, N. F.
- Nabel, K. See Rippel, A.
- Naber, hyperemesis gravidarum and other pregnancy intoxications, III, 662.
- Naber, A. D. See Denisenko, J. I.
- Nachimovitsch, N. M. See Lazarev, B. G.
- Nachmansohn, D., action of ions on choline-esterase, III, 533. Electricity elicited by organic chemical process [choline-esterase in electric organs], III, 715.
- See also Couteaux, R., and Feldberg, W.
- Nachod, F. C. See Brescia, F.
- Nadel, A., action of protein fractions in Schultz-Dale [anaphylactic] experiments, III, 67.
- Nadj, M. M. See Kotscheschkov, K. A.
- Nadkarny, V. V. See Telang, M. S.
- Nadler, J. E., Berger, A. T., and Ballinger, J., action of ouabain on splanchnic circulation in dog, III, 524.
- Nadler, S. B., and Cohn, J., familial polycythemia, III, 182.
- Nadrai, A., respiratory arrhythmia of heart in diphtheria, III, 884.
- Naegeli, T., adaptation of connective tissue and skeleton, A., III, 277.
- Naeslund, C., technique in experimental silicosis and value of the tracheal dust-blower for studying the effect of dust on the lungs, III, 257. Prevention of silicosis; experimental investigations on action of non-siliceous dusts and silica in the origin and development of silicosis, III, 445.
- Nag, N. C., and Pain, A. K., cultivation of *Phaseolus calcaratus*, Roxb.; some feeding experiments, III, 49. Nutrition with *Pisum sativum*. II, III, 54.
- Nagai, H. See Ogawa, T.
- Nagai, J., relationship between oxidation-reduction and tryptic and ereptic activities, III, 686.
- and Ito, T., fugu (*Spheroideis*) poisoning. I. Nitrogen distribution in purified poison, III, 682.
- Nagao, N., feeding experiments on white rats with 4'-amino-2:3'-dimethylazoxybenzene, II, 78.
- Nagasawa, F. See Ochiai, E.
- Nagel, A., and Fenkner, M., growth-inhibiting power of serum of immunised, tuberculous, and normal guinea-pigs on tubercle bacilli, III, 356.
- Nagel, R. H. See Niederl, J. B.
- Nagel, W., hydrochloric acid-collargol reaction of cerebrospinal fluid, III, 891.
- Nager, F. R., Holmgren's operation for otosclerosis in monkeys, III, 27. Histological findings in a case of otosclerosis after Holmgren's operation, III, 119.
- Naggatz, J. See Windaus, A.
- Nagle, N., and Graul, J., comparison of dark-field examination and nigrosine stain in demonstrating *Treponema pallidum*, III, 539.
- See also Sulkin, S. E.
- Nagler, F. P. O., reaction between the lethal toxin of *Cl. welchii* (type A) and human serum, III, 263.
- Nagy, A. H., evaluation of tubercle bacillus concentration methods of Petroff, Pottinger, and chemical flocculation, III, 77.
- Nahigian, R. See Kirschbaum, A.
- Nahinsky, P., and Laitinen, H. A., weighing flask for precision standardisation of strong alkalis in the absence of carbon dioxide, I, 377.
- Naide, M., use of vitamin-B₁₂ in rest pain of ischaemic origin, III, 232.
- Naidich, S., and Ricci, J. E., solubility of barium iodate monohydrate in solutions of uni-univalent electrolytes at 25°, and calculation of dissociation constant of iodic acid from solubility data, I, 108.
- Naito, H., and Ishimaru, K., enzymes in fruits and vegetables. II. Relation between ascorbic acid oxidase and copper ion in fruit and vegetable juices. III. Effect of sunlight on strength of ascorbic acid oxidase during sprouting and relation between activity of the enzyme and its concentration, III, 692, 871.
- Najjar, V. A., and Wood, R. W., hitherto unrecognised nicotinic acid derivative in human urine, III, 910.
- Nakagawa, T. See Shinkai, S.
- Nakahara, W., Inukai, F., and Ugami, S., dietary requirements for lactation. VIII. Effect of withdrawal of vitamin-L during lactation. X. Methods of testing for vitamin-L, III, 55. Vitamin-L and filtrate factor, III, 752.

- Nakahara, W., Inukai, F., Ugami, S., and Takahashi, Kenzo, dietary requirements for lactation. IX. Vitamin-L deficiency in mice, III, 55.
- and Mori, Kasuo, production of cirrhotic changes in liver by furfuraldehyde feeding, III, 665.
- Mori, Kasuo, and Fujiwara, T., inhibition of experimental production of liver cancer by liver feeding, III, 140.
- and Takahashi, Kenzo, effect of carcinogenic substances, especially carcinogenic azo-compounds, on animal growth, III, 667.
- See also Kishi, S., and Mori, Kasuo.
- Nakaidzumi, M., and Miyakawa, T., depth dose distribution of X-rays in rotation therapy, III, 530.
- Nakamura, H., Tanaka, J., and Yohda, Y., urinary diagnosis of cancer by using albino salamander, III, 509.
- Nakamura, Harukiti. See Asahina, Y.
- Nakamura, Hiroiti, dependence of enzyme formation, especially of amylase and protease, on the kind of barley and its germination, III, 692.
- Nakamura, Hiroshi, hydrogen peroxide and luminous bacteria, III, 353. Metabolism of purple bacteria. V. Hydrogen exchange and relative behaviour of Thiorhodaceae and Athiorhodaceae, III, 353.
- Nakamura, K., proteases. I. Proteolysis by trypsin and papain, III, 932.
- Nakamura, S. See Mizushima, S.
- Nakamura, T. See Nakanishi, S.
- Nakamura, Y. See Hirata, T.
- Nakanishi, S., Yamamoto, Mitiko, and Ikeda, H., pachymic acid, a new constituent of "bukuryo" (*Poria cocos*, Wolf.). I, II, 229.
- Yamamoto, Mitiko, and Nakamura, T., constituents of *Lentinus tuber-regium*, Fr., III, 548.
- Nakasone, T., catalase in eggs of silkworm (*Bombyx mori*, L.), III, 34. Sexual organs of silkworm, *Bombyx mori*, L. I. II. Changes in constituents according to development of ovary and testis. III. Catalase of ovary and testis, III, 211, 306.
- Nakata, S. See Titani, T.
- Nakayama, I. See Ochiai, S.
- Nakayama, M. See Utzino, E.
- Nakazawa, K., γ -substituted resorcinol derivatives. II. Synthesis of 3-aldehydoresacetophenone, 3-acetyl- β -resorcyaldehyde, and 2:3:6-trihydroxyacetophenone. III. Synthesis of 5:6-dimethoxyflavone, II, 46, 259.
- Nakazawa, Y., pharmacological studies on phthalic acid-bisdiethylamide, III, 922.
- Nalbandjan, A. B., photochemical oxidation of hydrogen. I, I, 78.
- Nalbandov, A., and Casida, L. E., gonadotropic action of pituitaries from pregnant cows, III, 900.
- Naldrett, S. N., and Maass, O., coexistence of the liquid and gaseous states of aggregation in critical temperature region; ethylene, I, 289.
- See also Mason, S. G.
- Nally-Porte, O., action of prolactin of pregnancy urine on castrated male guinea-pigs with ovarian grafts, III, 733. Action of pregnancy urine on castrated male guinea-pigs, III, 811.
- Nomekin, S. S., and Stukov, A. P., homologues of the camphor group. XIII. Partial synthesis of 4-methylcamphor, II, 183.
- Nande, M. S. See Guha, P. C.
- Nandi, B. K., reduction of dinitroveratrole with sodium sulphide, II, 250. Synthesis of compounds related to cinchonine and quinine, II, 382.
- See also Ganapathi, K.
- Nann, H. See Grube, G.
- Napier, L. E., anaemia in pregnancy in India, III, 787.
- and Das Gupta, C. R., haematological studies in Indians. XI. Choice of an anticoagulant, III, 379.
- Sankaran, G., Swaroop, S., and Rao, M. N., mean red cell diameters: standard curves for a Bengalee population, III, 89.
- Naprawnik, A. See Smith, Hilton A.
- Naps, (Miss) M., and Johns, I. B., optically active mono-substituted succinic acids and [their] derivatives, II, 373.
- Naqvi, M. A. See Prasad, M.
- Narang, K. S. See Jalota, R. S., and Ray, J. N.
- Narat, J. K., and Chobot, G., effect of sclerosing substances on healing of fractures, III, 698.
- Nargund, K. S. See Bokil, K. V., Dalal, G. A., Phalnikar, N. L., and Savkar, G. S.
- Narischkin, I. I., determination of vapour pressure of aluminium chloride and molten mixtures with sodium chloride at high temperatures, I, 202.
- Narischkina, Z. P., specificity of bacteriophages, and bacteriophage carriers, III, 77.
- Naruse, N. See Sata, N.
- Naselski, N. B., chemical changes in pancreatic tissue during secretion, III, 534.
- Nash, A. W. See Brancker, A. V., and Nissan, A. H.
- Nash, C. B., autophagia in rats traumatised during inanition, III, 672.
- Nash, P. I. See Cohen, L., and Sigler, L. H.
- Nasini, A. G., and Balian, A., electrophoretic mobility and protective action of emulsifiers, I, 212.
- and May, P. L., extremely sensitive method for the determination of traces of oxygen in gases, I, 231.
- Nason, G. I. See Forbes, H. S.
- Nasset, E. S. See Schifferin, M. J.
- Nassim, R. See Greenwood, W. F., and Solandt, D. Y.
- Nasta, M., and Lupascu, I., transformation of human and bovine strains of *B. tuberculosis* from the R into the S form by successive cultures on Löwenstein's medium, III, 266.
- Natanson, G. L., mechanism of photochemical decomposition of nitrosyl chloride, I, 123.
- Nath, M. C., and Gupta, T. N. S., action of artosterone on sexually immature male rats, III, 216.
- Nath, N. S. N. See Raman, (Sir) C. V.
- Nath, V. See Kumar, S.
- Nathanson, I. T., Brues, A. M., and Rawson, R. W., effect of testosterone propionate on thyroid and parathyroid glands of intact immature female rat, III, 733.
- and Rawson, R. W., effect of testosterone propionate on genital tract of adrenalectomised and ovariectomised immature female rats, III, 645.
- Shaw, D. T., and Franseen, C. C., effect of simultaneous administration of growth complex and oestradiol on mammary gland of hypophysectomised rat, III, 658.
- Nathanson, I. T., and Towne, L. E., urinary excretion of oestrogens, androgens, and follicle-stimulating hormone following administration of testosterone to human female castrates, III, 215.
- Nathanson, J. B., and Bartberger, C. L., optical properties of semi-transparent sputtered films determined by interference of light, I, 63.
- Naumann, M., blood pressure in arteria dorsalis pedis, III, 16.
- Naumov, S. N., and Bogoljubova, L. A., behaviour of halogen atoms of dichloride and dibromide of toluquinone, II, 48.
- and Danilevski, L. P., synthesis of cyclopentanone-2:5-dicarboxylic ester, II, 46.
- and Daniusevskaja, R. J., 2:3-diketol-methylcyclohexane-1:4-dicarboxylic ester, II, 48.
- and Dedusenko, L. S., isomerisation of ethyl citrate to ketipate, II, 35. Condensation of adipic and oxalic esters, II, 47. Mutual transformations of 2:3-diketocyclohexane-1:4-dicarboxylic ester and 2-hydroxycyclopentane-1:2:3-tricarboxylic ester, II, 47.
- and Emmanuilova, Z. I., action of bromine on cyclohexane-1:4-dione and its homologues, II, 47. Condensation product, $C_{10}H_{20}O_9$, of adipic with oxalic ester, II, 47.
- and Feigelman, C. E., product of reaction of succinylsuccinic with orthoformic ester, II, 48.
- and Gusinskaja, S. L., action of sodium ethoxide on 2:3-diketocyclopentane-1:4-dicarboxylic ester, II, 47.
- and Lavrenova, V. V., action of bromine on 2:3-diketocyclohexane-1:4-dicarboxylic ester, II, 48.
- and Leontieva, E. V., behaviour of halogen atoms of *p*-benzoquinone di- and tetra-bromides, II, 48.
- and Manuilkin, Z. M., metallo-organic tin derivatives, II, 38.
- and Medinski, C. B., preparation of quinine iodo-hydriodide, II, 237.
- and Nazarova, Z. N., reaction of benzoquinone dibromide with ketones, II, 48.
- and Permlnova, A. N., condensation of pimelic with oxalic ester, II, 48.
- and Volkenshtein, N. S., 2:3-diketol-1:4-dimethylcyclohexane-1:4-dicarboxylic ester, II, 48.
- and Volodina, O. A., cyclohexane-1:2-dione, II, 47.
- and Zakutskaja, M. A., transformation of 2:3-diketocyclohexane-1:4-dicarboxylic ester when exposed to sunlight, II, 48.
- Nauta, W. T., and Mulder, D., diarylmethane derivatives. VI. Occurrence of the di-*p*-anisylmethyl radical. VII. Properties of the diphenylmethyl radical, II, 10, 13.
- Wuis, P. J., and Mulder, D., reactions in which diarylmethyl radicals can be detected, II, 122.
- Navalkar, B. S., ecology of mangroves. I. Determination of osmotic pressure of *Avicennia alba*, Blume, III, 545.
- Navaschin, M. S., and Gerasimova, H., production of polyploid plants from leaves treated with colchicine, III, 364.
- Naves, Y. R., and Perrotet, E., volatile plant substances. XII. Structure of aromadendrene, II, 377.

- Naville, M. See Seiclounoff, F.
- Naylor, E., effect of X-rays and radium on regeneration of *Bryophyllum calycinum*, III, 871.
- Nazarov, V. I., optical phenomena with suspensions of potato starch in benzene, I, 439.
- Nazarova, Z. N. See Naumov, S. N.
- Neal, H. R. See Calingaert, G.
- Neal, P. A., dermatitis in printers, III, 445.
- Neary, G. J., β -ray spectrum of radium-E, I, 241.
- Neatby, K. W. See McCalla, A. G.
- Nebe, E. See Hein, F.
- Nebel, B. R., chlorazol-black E as aceto-carmine auxiliary stain, III, 626.
- Nebel, R. W. See Bartlett, P. D.
- Necheles, H., gall-bladder function, III, 136.
- Appel, M., Wald, D., and Olson, W., gastric secretion in extragastric malignancy, III, 34.
- Hanke, M. E., and Fantl, E., preparation and assay of inhibitor of gastric secretion and motility from normal human urine, III, 309.
- and Masur, W., gastro-intestinal pathology in dogs following administration of acetylcholine and pitressin, III, 37.
- Motel, W. G., Kosse, J., and Neuwelt, F., effects of acetylcholine, acetyl- β -methylcholine, and prostigmine on secretion of stomach of man and dog, III, 36.
- Neuwelt, F., Steiner, N., and Motel, W. G., experimental study of diphenyl-acetyl-diethylaminoethanol hydrochloride (trasentin), III, 249.
- Rappaport, B. Z., Green, R., Mares, P., and Mesrirow, S., allergy of gall bladder: study using Graham-Cole test and leucopenic index, III, 743.
- See also Kroll, H., Levinson, S. O., Marks, L., Neuwelt, F., Popper, H. L., and Spier, E.
- Neciullah, N. See Lynen, F.
- Neddermeyer, S. H., and Anderson, C. D., nature of cosmic-ray particles, I, 189.
- Nedungadi, T. M. K., effect of crystal orientation on Raman spectrum of sodium nitrate, I, 9. Effect of temperature on Raman spectrum of quartz, I, 243. Raman effect in Rochelle salt crystals, I, 346.
- See also Raman, (Sir) C. V.
- Nedved, M., and Woldrichova, O., determination of blood-protein, III, 380.
- Nedzel, A. J., histologic changes following vascular spasm in central nervous system (pitressin episodes), III, 113.
- See also Cohen, H. R.
- Needham, J., Rogers, V., and Shen, S. C., morphogenesis and metabolism: studies with the Cartesian diver ultramicro-manometer; aerobic glycolysis measurements on the regions of amphibian gastrula, III, 217.
- See also Boell, E. J., and Lawrence, A. S.
- Needles, R. J. See Smith, F. J.
- Neel, A. V., content of cells and proteins in the normal cerebrospinal fluid, III, 84.
- Neelakantam, K., determination of lead permanganometrically (Low's method), I, 445.
- Neergaard, K. von, significance of blood sedimentation rate in medicine, III, 184.
- Neeser, J. See Demole, M.
- Neff, F. C. See Hamilton, T. R.
- Negelein, E., and Brömel, H., isolation and properties of R-diphosphoglyceric acid, II, 117. Production of glycerol during fermentation, III, 536.
- Negresco, T., and Crook, W. J., constitution of the system $\text{SiO}_2 + \text{FeO} + \text{Fe}_2\text{O}_3 + \text{CaO} (+ \text{MgO})$, I, 118.
- Negro, R. See Giordani, M.
- Neher, H. V., east-west effect in Southern India, I, 341.
- See also Pickering, W. H.
- Nehring, K., effect of various nitrogenous non-protein compounds ("amides") on the protein metabolism of ruminants: glycine, urea, ammonium acetate, III, 230.
- and Schramm, W., replacement of protein [in feeding-stuffs] by "amides," V. "Glucose-ureide" for pigs, III, 591.
- Neill, J. M., Hehre, E. J., Sugg, J. Y., and Jaffe, E., serological studies on sugar, III, 454.
- Neill, R. M., reproductive cycle in *Salmo salar* (Lin.), III, 125.
- Neilson, E. K., Gerber, L. P., and Corley, R. C., retention of nitrogen of amino-acids administered singly or in mixture to dogs fed diets low in protein, III, 149.
- Neiman, M. B. See Blat, E. I.
- Nekrassov, N. I., Bondarenko, A. V., and Maltzeva, P. M., decomposition of iron nitrides by bombardment with slow electrons, I, 35.
- Nekula, J., retinitis during pregnancy, III, 301.
- Nelemans, F. A., significance of pericardium, III, 384. Function of pericardium, III, 565.
- Nell, W., and Schäfer, D., elimination of adrenal glands by electrocoagulation in animal experiments, III, 395.
- Nelson, A. A., hemorrhagic cortical necrosis of adrenals in rats on deficient diets, III, 409. Pericardial milk spots, III, 475.
- Nelson, D., administration of drugs to rats, III, 865.
- and Greene, R. R., biological indicators of androgenic activity, III, 645.
- Greene, R. R., and Wells, J. A., variations in effectiveness of percutaneously applied androgens in rat, III, 645.
- Nelson, E. See Alvarez, L. W., and Hebb, M. H.
- Nelson, E. E., variability in response to drugs, III, 605.
- See also Paine, W. G.
- Nelson, H. A. See Vernon, A. A.
- Nelson, H. R. See Harrington, R. A.
- Nelson, J. B., development of vaccinia and variola viruses in embryonated eggs at 28°, III, 544.
- Nelson, J. F. See Corkill, A. B.
- Nelson, J. M. See Dalton, H. R., Lovett-Janison, P. L., Ludwig, B. J., and Parkinson, G. G., jun.
- Nelson, J. W. See Christensen, B. V., and Hansen, A. E.
- Nelson, N., Grayman, I., and Mirsky, I. A., utilisation of acetone bodies. III. Influence of adrenalectomy, III, 328.
- See also Grayman, I., and Mirsky, I. A.
- Nelson, O. E., and Stabler, R. M., effect of testosterone propionate on early development of reproductive ducts in female sparrow-hawk, III, 874.
- Nelson, R. A. See Hendricks, S. B.
- Nelson, R. C., production of ethylene by ripening McIntosh apples, III, 943.
- See also Warkany, J.
- Nelson, W. O. See Janes, R. G., Merckel, C., and Segaloff, A.
- Nemir, R. L. See Smith, C. H.
- Neogi, P., and Mandal, K. L., co-ordinated copper compounds with propylenediamine, II, 38.
- Neri, F., staining bacterial cilia, III, 870.
- Nerisson. See Taboury, M.
- Neseni, R., metabolism of the racoon, III, 821.
- Nesin, S. See Fazekas, J. F., and Himwich, H. E.
- Nesmejanov, A. N. See Anisimov, K. N., Freidlin, R. C., and Kotscheschkov, K. A.
- Ness, I., lattice structure of monoclinic $\text{FeSO}_4 \cdot 7\text{H}_2\text{O}$ (green vitriol, melanterite), I, 349.
- Nessius, A. See Chrétien, A.
- Nestoresco, N., Pop, A., and Theodoresco, B., comparison between methods of immunising horses in preparation of antiperfringens serum, III, 453.
- and Theodoresco, B., preparation of antiperfringens serum, III, 688.
- Neter, E., action of sulphanilamide on hemolytic enterococcus, III, 331. Effect of temperature on bacteriostatic action of sulphanilamide on members of enterococcus group, III, 519. Comparative bacteriostatic action of sulphanilamide, sulphapyridine, sulphanilyl-sulphanilamide, and sulphathiazole on enterococci, III, 756.
- and Heide, A. M., pathogenicity, biochemistry, and antigenic structure of *Shigella alkalescens*, Andrewes, III, 454.
- Neterval, C. R., extraction of urinary androgens, III, 618.
- Netherton, E. W. See Curtis, G. H.
- Netolitzky, P., aura in cardiac shock, III, 201.
- Nettleship, A., leucogenic bone marrow and leucocyte extracts, III, 628.
- Nettleton, H. R., absolute measurement of electrical resistance, I, 41.
- and Sugden, S., magnetic susceptibility of nickel chloride, I, 153.
- Neubauer, L. G. See Brandt, C. W.
- Neuberg, C., and Fischer, H. A., hydro-tropic action of isomerides of C₃ and C₄ series, I, 107.
- and Feiser, E., supposed optical inactivation of d-tartaric acid by pancreas, III, 140.
- and Ziffer, R., trapping acetaldehyde produced during alcoholic fermentation, III, 165.
- Neuberger, A., cyclic structure of glucosaminides, II, 120.
- and Yuill, M. E., relationship of carbohydrate component of proteins to their antigenic properties, III, 269.
- Neuberger, H. H., subjective phenomena of vision in polarised light, III, 803.
- Neuburger, K. T. See Whitehead, R. W.
- Neuenschwander-Lemmer, N. See Hausberger, F. X.
- Neuert, H., angular distribution of the transmuted particles in transformation processes of light nuclei, I, 90.
- Neufeld, A. H., and Collip, J. B., the antagonist to hyperglycaemia in pituitary extracts, III, 207. Effect of pituitary extracts on ketonuria, fat content, and fat distribution in liver and tissues of mice, III, 207. Thermostability of pituitary extracts in relation to keto-genic activity, III, 302.

- Neufeld, A. H., Scoggan, S. M., and Stewart, G. S., effect of pituitary preparations on total body-glycogen, -water, -nitrogen, and -fat of mice, III, 730.
- Neufeld, O. See Frankel, M.
- Neugebauer, T., self-multiplication of virus molecules, III, 455.
- Neuhaus, A., action of thyroxine on pituitary in rats, III, 644.
- Neuhaus, M. E., relation between amount of *cn*-substance and strength of its action in *Drosophila melanogaster*, III, 373. Phenogenetic analysis of the eye colour in *Drosophila melanogaster*, III, 572.
- Neuman, C. P. See Puckett, W. O.
- Neumann, E. See Benrath, A., and Sonn, A.
- Neumann, K., and Costeanu, V., evaporation coefficients of polar crystals, I, 154.
- Neumann, M. See Ermakova, K., and Gniubkin, V.
- Neumann, R. E., and Neumann, O. V., application of Polanyi theory to bound water. I. Calculation of adsorption potential from vapour pressure of bound water. II. Effect of nature of dissolved substances on water bound from solutions, I, 408.
- Neumann, O. V. See Neumann, R. E.
- Neurath, H., intramolecular folding of polypeptide chains in relation to protein structure, II, 199.
- and Cooper, G. R., apparent molecular shape and mol. wt. of proteins, from viscosity and diffusion measurements, I, 411. Diffusion constant of tomato bushy stunt virus, III, 938.
- Neurath, O., absorption of water from air (negative insensible perspiration), III, 158.
- Neustatter, W. L., and Freeman, H., prevention of fear in cardiazol therapy, III, 112.
- Neuweiler, W., hippuric acid synthesis during pregnancy and in the puerperium, III, 149. Non-occurrence of citrin (vitamin-P) in milk, III, 236. Absorption of vitamin-B₁ from the placenta, III, 593.
- Neuwelt, F., and Necheles, H., experimental cinchophen ulcer, III, 740.
- Olson, W. H., and Necheles, H., preparing large Pavlov pouches, III, 740.
- See also Necheles, H., Levinson, S. O., Meyer, Jacob, and Spier, E.
- Never, H. E. See Vincke, E.
- Neville, H. A. See Forbes, W. C., and Hazlehurst, T. H.
- Nevin, T. E., rotational analysis of the first negative band system of oxygen. I, I, 183.
- Nevius, W. B., and McGrath, A. C., duration of immunity to diphtheria achieved by toxin-antitoxin and alum-precipitated toxoid, III, 770.
- Nevot, A. See Urbain, A.
- Newburger, R. A., and Peters, J. P., intercapillary glomerulosclerosis, III, 312.
- Newburgh, L. H. See Murrill, W. A.
- Newcomer, E. H., osmic impregnation method for mitochondria in plant cells, III, 786.
- Newell, E. T., carcinoma of lip, III, 591.
- Newell, J. M., attempts to detect reaction between human allergic serum and its antigen, III, 339.
- Sterling, A., Orman, M. F., Burden, S. S., and Krejci, L. E., electrophoretic separation of antibody from human allergic serum, III, 255.
- Newell, R. R. See Bayer, L. M.
- Newing, R. A., interrelation of molecular constants for diatomic molecules. II, I, 198, 311.
- Newitt, D. M., and Baxt, L. M., oxidation of aldehydes. II. Products of their combustion. II, II, 6.
- Baxt, L. M., and Kelkar, V. V., oxidation of aldehydes. I. Combustion zones of butaldehyde, isobutaldehyde, propaldehyde, acetaldehyde, glyoxal, and acraldehyde, II, 6.
- and Ruhemann, M., two-phase equilibrium in binary and ternary systems. II. System methane-ethylene. III. System methane-ethane-ethylene, I, 413.
- and Wassermann, A., kinetics of a diene association under constant volume conditions, I, 363.
- See also Burgoyne, J. H., and Rais-trick, B.
- Newkirk, A. E. See Laubengayer, A. W.
- Newman, A. B. See Schwarz, H.
- Newman, F. H., relative intensities of spectral lines, I, 1. Electric glow between carbon electrodes, I, 1.
- Newman, H. W., chemical transmission of nervous impulses, III, 198.
- Winkle, W. van, jun., Kennedy, N. K., and Morton, M. C., comparative effects of propylene glycol, other glycols, and alcohol on the liver directly, III, 338.
- Newman, M. S., pressure regulator for vacuum distillation, I, 378. Synthesis of 1-methylchrysene and related compounds, II, 213. Synthesis of coronene, II, 327. Synthesis of 4:5-dimethylchrysene, II, 370.
- and Joshel, L. M., synthesis of 2-methyl-3:4-benzophenanthrene, II, 213.
- Joshel, L. M., and Wise, P. H., β -benz-hydrilglutaric acid, II, 308.
- Newton, A., and Buckler, E. J., determination of methylpropene by a modified Denigès reagent, II, 264.
- Newton, M. See Johnson, T.
- Newton, R. F. See Bechtold, M. F.
- Neyman-Pilat, E., molecular structure of aliphatic compounds and their boiling points, I, 16.
- Ni, T. G., nutritional encephalomalacia and factors accelerating its onset, III, 858.
- Niblock, H. See Miles, F. D.
- Nichita, G., and Szigeti, J., antitoxic action of "hormantoxone" [detoxicating hormone of liver]. II, III, 742.
- and Tuschak, N., antitoxic action of "hormantoxone" [detoxicating hormone of liver]. I, III, 742.
- Nicholes, H. J. See Herrin, R. C.
- Nicholls, J. V. V. See Tooke, F. T.
- Nieholls, L., and Nimalasuriya, A., adaptation to a low calcium intake in reference to the calcium requirements of a tropical population, III, 426. Treatment of eye, skin, and mouth lesions due to vitamin deficiencies, III, 818.
- Nichols, A. C., and Glenn, P. M., bacterial flora of ileum compared with that of throat and stomach in normal subjects, III, 416.
- Nichols, C. W., mounting embryological material, III, 786.
- Nichols, J. E., congenital solitary kidney, III, 277.
- Nichols, M. H., thermionic constants of tungsten as a function of crystallographic direction, I, 184.
- Nichols, S. H., jun., Evans, W. L., and McDowell, H. D., synthesis of tri-saccharides; their behaviour in alkaline solution, II, 298.
- See also Braun, C. E.
- Nicholson, D. E. See Hodgson, H. H.
- Nicholson, H. C., and Trimby, R. H., attempt to detect reflex changes in bronchial calibre synchronous with respiration, III, 477.
- See also Trimby, R. H.
- Nicholson, T. F. See Jackson, S. H.
- Nickel, W. F. See Müller, O. H.
- Nicklaus, C. E., and Tippet, N., determination of iodine in thyroid, III, 496.
- Nico, R., serum-proteins and reticulo-endothelial system, III, 560. Determination of serum-proteins, III, 561. Variations in concentration of serum-proteins produced by 2:4-dinitrophenol, III, 604.
- Nicodemus, R. E. See Hunt, H. F.
- Nicol, B. M., control of gastric acidity in peptic ulcer, III, 133. Renal changes in alkalosis, III, 418.
- Nicol, J. M. See Grover, D. W.
- Nicola, O. F. F., pharmacodynamic study of iodine derivatives, III, 604.
- Nicolaescu, V. See Spacu, G.
- Nicolai, H., indole absorption in small intestine of healthy rat, III, 501.
- Nicolesco, G., Cionga, E., and Constantinesco, E., chemical composition of fruit of *Avena elatior*, I, III, 777.
- Nicolet, M., forbidden atomic transitions in spectra of the aurora and of the night sky, I, 305.
- Nicolle, J., and Vodar, B., photometric study of the ultra-violet absorption spectrum of nitrous oxide at the temperatures 20° and -90° C., I, 144.
- Niedbal, M. See Klisiek, A. C.
- Niederl, J. B., Baum, H., McCoy, J. S., and Kuck, J. A., micro-Carius halogen and sulphur determination, II, 318.
- and Nagel, R. H., spirochromans, II, 187.
- Niederl, V., and Charney, J., steric hindrance in ketone-naphthol condensations; condensations of naphthols with cyclohexanone, II, 166.
- Niederl, V., and Grumer, J., steric hindrance in ketone-phenol condensations; condensation of guaiacol with cyclic ketones, II, 168.
- and Roth, R. T., disproportionation in synthesis of aryloxymalonic acids, II, 278.
- and Vogel, H. J., aldehyde-resorcinol condensations, II, 371.
- and Ziering, A., flavans, II, 286.
- Niederl, V. See Niederl, J. B.
- Niekerk, J. van, and Blik, M. S. C., vitamin-D content of colostrum in cows, III, 54.
- Niel, R. See Bonnet, P.
- Nielsen, A. H., and Gordy, W., infra-red spectrum and molecular constants of nitric oxide, I, 8.
- Nielsen, H. H. See Cameron, D. M., Sears, W. C., Shaffer, W. H., and Whitcomb, S. E.
- Nielsen, J. P., determination of magnesium in biological materials; oxidation method, III, 275.
- See also Blinks, L. R.
- Nielsen, J. R., Ward, N. E., and Dodson, H., Raman spectra of inorganic compounds, I, 346.

- Nielsen, M., Herrington, L. P., and Winslow, C. E. A., effect of posture on peripheral circulation, III, 193.
- Nielsen, N., and Dagys, J., growth-promoting action of amino-acids. VI. Action of citric acid; action of β -alanine, III, 610.
- Nielsen, V. See Hansen, P. A.
- Nielsen, W. M., Ryerson, C. M., Nordheim, L. W., and Morgan, K. Z., mesotron lifetime, I, 143.
- See also Hopkins, I. I.
- Nielson, E., Oleson, J. J., and Elvehjem, C. A., fractionation of the factor preventing nutritional achromotrichia, III, 596.
- Niemann, C. See English, J., jun., and Redemann, C. E.
- Niemierko, W., and Łoszycey, C., fat metabolism in sprats, III, 57.
- Nier, A. O., coefficient of thermal diffusion of methane, I, 65. Concentration of ^{13}C by thermal diffusion, I, 176. Coefficient of thermal diffusion of neon and its variation with temperature, I, 203. Mass spectrometer for routine isotope abundance measurements, I, 376.
- Booth, E. T., Dunning, J. R., and Grosse, A. V., nuclear fission of separated uranium isotopes, I, 187. Fission of separated uranium isotopes, I, 278.
- See also Booth, E. T., and Wood, H. G.
- Niessen, K. F., Curie constants and Curie temperatures of nickel alloys, I, 20.
- See also De Groot, W.
- Niethammer, A., growth of microscopic fungi of soil, III, 166.
- Nieuwenburg, C. J. van, necessity of reducing analytical weights to normal temperature and pressure, I, 236.
- Nieuwenhuizen, C. L. C. van, venous pressure after activity as test of circulatory efficiency, III, 385.
- Nigg, C., Crowley, J. H., and Wilson, D. E., use of chick embryo cultures of influenza virus in complement fixation tests, III, 828.
- Nightingale, (Miss) D., and Carton, B., jun., action of aluminium chloride on aromatic hydrocarbons. II. 1:3-Dimethyl-4-propylbenzenes, II, 160.
- Nihous, M., germination of seeds of *Geum urbanum*, III, 271.
- Nikiforova, O. K. See Porai-Koschitz, B. A.
- Nikitenko, M. F., comparative morphological study of structure of lens restored from border of iris in amphibia, III, 397.
- Nikitin, B. A., rare gases. IV. Formation of mixed crystals between rare gases and other substances. V. Combination of radon with phenol, I, 157.
- Nikitin, L. V., electrochemical-acoustic phenomena. III. Reception of sound by polarised electrodes. IV. Reception of sound by semi-permeable membranes, I, 414.
- Nikitin, V. I., digestion in rumen of calves, III, 583.
- Nikitina, A., and Prichotko, A., absorption of light by crystals of bromine and other halogens at $20\text{--}4^\circ\text{K}$, I, 50.
- Nikitina, E. A., poly-substituted sodium phosphomolybdates, I, 298.
- Nikolaev, A. G. See Galle, R. R.
- Nikolaev, A. V., and Tschelischtscheva, A. G., formation of protective crust on sodium chloride on its dissolving in sodium sulphate solutions, I, 170.
- Nikolaev, N. S., reaction between hydrogen sulphide and sulphur dioxide in aqueous media, I, 29.
- Nikolaev, V. I., determining composition of solid phases of quaternary systems in equilibrium, I, 164.
- and Katik, I. S., specific conductivity in binary and ternary systems containing sodium and magnesium chlorides and sulphates, I, 74.
- and Rudenko, E. I., adsorptive properties of dust particles carried into salt lakes by wind and entering into the composition of lake silts, I, 237.
- and Stepanov, B. I., annual changes in the hydrochemical conditions in the Yashalta lakes, I, 44.
- Nikolaeva, A. F., and Putschkov, P. V., hydrogenation of Δ^8 -heptene and n -heptane under pressure, II, 33. Hydrogenation of cyclohexene under pressure, II, 159.
- Nikuni, Z., and Hayashi, H., components of bark of *Rhamnus japonica*. IV. Nucleus of α -sorigenin, II, 130.
- Nilakantan, P. See Raman, (Sir) C. V.
- Nilova, V. P., rôle of leaves in storage of starch by potato tubers as determined by their position on the plant, III, 81.
- Nilssen, B., and Paulsen, N., test for cobalt, I, 270.
- Nimalasuriya, A. See Nicholls, L.
- Nimmo, C. C. See Luck, J. M.
- Nims, L. F., Gibbs, E. L., Lennox, W. G., Giggs, F. A., and Williams, D. J., adjustment of acid-base balance of patients with petit mal epilepsy to overventilation, III, 720.
- Ninomiya, H., salivary amylase. I. Globulin nature, III, 766.
- Nishi, T., membrane permeability of dyes. I. Velocity of dialysis of orange II, I, 110.
- Nishida, K., and Uota, H., sesquiterpene alcohol, torreyol. I, II, 283.
- Nishikawa, H., sulochrin, a mycelial constituent of *Oospora sulphurea-ochracea*, II, 92. Biochemistry of filamentous fungi. VI. Mycelial constituents of *Oospora sulphurea-ochracea*; trimethylsulochrin and its fission products, II, 348.
- Nishimura, I. See Morigami, S.
- Nishina, T., magnetic viscosity of single crystals of iron, I, 152.
- Nishina, Y., and Moriaki, D., sex-linked mutations of *Drosophila melanogaster* induced by neutron radiations, III, 179.
- Sekido, Y., Simamura, H., and Arakawa, H., cosmic-ray intensities and cyclones, I, 279. Cosmic-ray intensities and air masses, I, 279. Air-mass effect on cosmic-ray intensity, I, 309. Cosmic-ray intensities in relation to cyclones and anticyclones, I, 342.
- Yasaki, T., Ezoe, H., Kimura, K., and Ikawa, M., induced β -activity of uranium by fast neutrons, I, 340. Fission products of uranium produced by fast neutrons, I, 341.
- Nishioeda, M. See Yamafuji, K.
- Nishizawa, S. See Yamamoto, R.
- Nishizawa, T. See Ochiai, E.
- Nissan, A. H., Clark, L. V. W., and Nash, A. W., rotary viscosimeter, I, 177. Dependence of viscosity of liquids on constitution, I, 289.
- Nissen, H. W. See Yerkes, R. M.
- Nitsche, H., temperature of various parts of the body in resting horses, III, 225. Nitrogen elimination in urine in relation to the intake and output of water, and determination of minimum protein requirement in resting horses, III, 326. Protein requirement of horses at rest and at work, III, 913. Examination of horse faeces in metabolism trials, III, 917.
- Nitta, I., optical anisotropy of molecular crystals, I, 245.
- Nitzescu, I. I., and Diaconescu-Putna, M., bile and calcemia in hypervitaminosis-D, III, 430.
- and Ioanid, V., blood-sugar in B_1 -avitaminotic chicken, III, 512. Vitamin- B_1 (aneurin) and blood-sugar, III, 512.
- Niven, C. D., thermal conductivity of sedimentary rocks, I, 398.
- Niwa, K., determination of the vapour pressure of solid salts. III. Vapour pressure of TiCl_3 , TiBr_3 , TiI_3 , PbCl_2 , PbBr_2 , PbI_2 , ZnCl_2 , ZnBr_2 , ZnI_2 , CdCl_2 , CdBr_2 , and CdI_2 , and calculation of their thermodynamic values, I, 389.
- Niwa, S. See Kuki, T.
- Nix, F. C., and Treptow, A. W., thallous sulphide photo-e.m.f. cell, I, 176.
- Nixon, E. N. See Rogoff, J. M.
- Niyogi, S. P., Patwardhan, V. N., and Mordecia, I., basal metabolism in Bombay, III, 147.
- Nizovkina, T. See Moldavski, B.
- Noack, K., and Pirson, A., effect of iron and manganese on nitrogen assimilation of *Chlorella*, III, 546.
- Pirson, A., and Michels, H., inhibition of assimilation in green algae after depriving of oxygen, III, 173.
- Pirson, A., and Stegmann, G., trace elements required for *Chlorella*, III, 776.
- Nobécourt, P., synthesis of vitamin- B_1 in plant tissue cultures, III, 512.
- Noble, G. K., and Greenberg, B., testosterone propionate a bisexual hormone in American chameleon, III, 848.
- and Wurm, M., effect of testosterone propionate on black-crowned night heron, III, 645.
- Noble, R. L., direct gynæcogenic and indirect œstrogenic action of testosterone propionate in female rats, III, 646. Effects of synthetic œstrogens and carcinogens when administered to rats by subcutaneous implantation of crystals of tablets, III, 653. Effects of continuous oral administration of aqueous diethylstilbestrol solutions to rats, III, 655.
- McEuen, C. S., and Collip, J. B., mammary tumours produced in rats by action of œstrone tablets, III, 589.
- See also Drummond, J. C., and Liu, S. H.
- Nobori, H. See Kawai, S.
- Nobuoka, N., influence of ultra-short waves on the growth of rabbit sarcoma. VII. Influence of local irradiation on the whole individual, III, 46.
- Nobuoka, Z., hæmorrhagic œmia: function of reticulocytes, III, 789.
- Noda, T., and Hasegawa, M., effect of addition of salt vapour on synthesis and crystal growth of spinel, I, 328.
- and Ishihara, Y., effect of addition of salts on crystal growth of alumina, I, 328.

- Noddack, W., assimilation of carbonic acid by green plants. I. Problems of assimilation, III, 270.
- and Eichhoff, H. J., assimilation of carbonic acid by green plants. II. Assimilation and light intensity. III. Light absorption of algae suspensions, III, 270, 363.
- See also Eichhoff, H. J.
- Nodz, R., and Goto, R., action of weak alkalis on glucose. II., II, 323.
- and Kunitika, S., acetylformoin. I. Preparation, II, 323.
- Noé, N. G. See Lévy-Bruhl, M.
- Noehren, W. A. See Madden, S. C.
- Noer, R. J., and Johnston, F. G., decomposition of small bowel in intestinal obstruction, III, 39.
- Noethe, R. See Velten, C.
- Noetzel, R. See Bühler, F.
- Noetzelin, M., volcanism and nuclear chemistry. I. and II., I, 242, 342.
- Nogami, H. See Asahina, Y.
- Nogtev, V. P., origin and function of nodules on roots of meadow foxtail (*Alopecurus pratensis*, L.), III, 362.
- Nolan, J. F. See Smith, E.
- Nolan, J. J., equilibrium of ionisation in the lower atmosphere, I, 425.
- Nolan, T. J., and Keane, J., chemical constituents of lichens found in Ireland; *Lecanora gangaleoides*. II., II, 256.
- Keane, J., and Davidson, V. E., chemical constituents of the lichen *Parmelia latissima*, Fée, III, 610.
- Nolf, P., intrinsic innervation of bird's gizzard, III, 416.
- Noller, C. R., saponins and sapogenins. XIV. So-called pyridazines of steroid diones, II, 18.
- and Raney, D. C., equilibrium composition of magnesium *n*-butyl chloride solutions in ethyl ether, II, 300.
- See also Doering, W. E., and Todd, D.
- Nollet, H., and Raffy, A., riboflavin (vitamin-B₂) content of organs of the frog (*Rana viridis*), III, 323.
- Nonaka, I., resonance capture of slow neutrons and emission of γ -rays, I, 52.
- Nonaka, N. See Watanabe, Y.
- Nonidez, J. F., distribution of cardiac nerves, with special reference to identification of sympathetic and parasympathetic post-ganglionics, III, 473.
- Nonnenbruch, See Brugsch, T.
- Noojin, R. O. See Callaway, J. L.
- Noran, H. H., placenta accreta, III, 32.
- Norbury, A. L., nature of intermetallic lattices, I, 317.
- Norbury, F. G., gonorrhoeal myelitis with associated porphyria following sulph-anilamide, III, 599.
- Nord, F. F. See Wirth, J. C.
- Nordenfelt, O., electrocardiogram in chronic aneurysm of heart, III, 98.
- Nordenfelt, P. J. See Mannheimer, E.
- Nordenson, N. G., experimental leucocytosis in man, III, 282.
- Nordfeldt, S., iron metabolism in rat, III, 376.
- Nordheim, G., Sponer, H., and Teller, E., ultra-violet absorption systems of benzene vapour, I, 343.
- See also Sklar, A. L.
- Nordheim, L. W. See Bethe, H. A., and Nielsen, W. M.
- Nordland, M. See Downey, H.
- Nordsieck, A., electric quadrupole moment of the deuteron, I, 399.
- Lamb, W. E., jun., and Uhlenbeck, G. E., theory of cosmic-ray showers. I. Furry model and fluctuation problem, I, 242.
- Nordström, L. See Weidenhagen, R.
- Norling, F., determination of β - β coincidences, I, 89. Efficiency of γ -ray counters, I, 382.
- Norman, A. G. See Kleczkowska, J.
- Norman, R. M. See Whitnall, S. E.
- Norris, E. R., and Donaldson, L. R., effect of fat and cholesterol on growth of young salmon, III, 749.
- and Elam, D. W., crystalline salmon pepsin, III, 261.
- See also Troescher, E. E.
- Norris, J. F., and Arthur, P., jun., condensation of esters with aromatic hydrocarbons by means of aluminium chloride, II, 209.
- and Bearse, A. E., reactivity of atoms and groups in organic compounds. XX. Effect of substituents on the relative reactivities of the hydroxyl group in derivatives of benzoic acid, II, 219.
- and Ingraham, J. N., trialkylated benzenes and their compounds with aluminium chloride and with aluminium bromide, II, 270.
- and Klemka, A. J., preparation of nitriles and amides; reactions of esters with acids and with aluminium chloride; use of the salt, NaCl, AlCl₃, in the Friedel-Crafts reaction, II, 300.
- and Wood, J. E., 3rd, intermediate complexes in the Friedel-Crafts reactions, II, 301.
- Norris, L. C. See Bauernfeind, J. C., Gallup, W. D., Hodson, A. Z., and Schumacher, A. E.
- Norris, R. F. See Veer, J. B. V.
- Norris, R. O., and Hennion, G. F., chlorination of hexinene in reactive solvents, II, 148.
- North, E. A., Keogh, E. V., Anderson, G., and Williams, Stanley, passive immunity in experimental pertussis, III, 76.
- North, H. B. See Pfiffner, J. J.
- North, S. B. See Mather, K.
- Northern, H. T., protoplasmic structure of *Spirogyra*. III. Effects of anaesthetics on protoplasmic elasticity, III, 173.
- Northey, E. H. See Climenko, D. R., Crossley, M. L., and Hultquist, M. E.
- Northrop, J. H. See Herriott, R. M.
- Northrup, D. L., Van Atta, C. M., and Van Atta, L. C., construction and cooling of large vapour traps, I, 377.
- Northrup, R. B. See Hatch, T.
- Northup, D. W., and Van Liere, E. J., intestinal secretion during anoxia, III, 134.
- See also Van Liere, E. J.
- Northup, M. A., and Lee, O. I., thermoluminescence of some common and unusual minerals, I, 378.
- Norton, A. R., Royer, G. L., and Koegel, R., ash in organic compounds; determination by micro-technique with automatic combustion, II, 199.
- See also Seaman, W.
- Norton, F. J., electrical characteristics of molecular films, I, 23.
- Norton, H. M. See Quayle, O. R.
- Norton, J. A. See Kharasch, M. S.
- Norton, L. B., distribution of nicotine between water and petroleum oils, I, 157.
- Bigelow, C. R., and Vincent, W. B., partial vapour pressures from nicotine solutions at 25°, I, 215.
- Nosik, W. A. See Gardner, W. J.
- Nosworthy, M. D., anaesthetic problems in urology, III, 334.
- Noth, P. H., and Barnes, A. R., electrocardiographic changes in pericarditis, III, 475.
- and Wilbur, D. L., chemical changes in blood of patients with pyloric obstruction, III, 663.
- Notkin, L. J., Kirsch, E., and Albert, S., value of Woldman's phenolphthalein test for gastro-intestinal lesions, III, 36.
- Novak, A. See Krestinski, V.
- Novak, M., preservation of stored blood with sulph-anilamide, III, 332.
- Novelli, A., sympathomimetics; preparation of *N*-substituted β -phenylisopropylamines, II, 75. Action of formamide on benzoin derivatives; formation of diarylglyoxalines and tetraarylpiprazines, II, 109. Action of amines on 9-bromo-2-nitrofluorene; colour reaction for pyridine, II, 214. Sulph-anilamides. I. 3-(*p*-Aminobenzensulphonamido)carbazole, II, 358.
- and Giunti, M. H., oestrogenic action of fluorene derivatives, III, 581.
- Novello, F. C. See Fieser, L. F.
- Noverraz, M. See Gigon, A.
- Novick, R. G., Laurence-Moon-Biedl syndrome, III, 484.
- Novikov, I. I. See Vukalovitch, M. P.
- Novochatski, I. P., and Kalinin, S. K., molybdenum in mineral, mine, and surface waters, I, 43. Manganese content of ore-mine waters, I, 332. Chemistry of ore-mine waters according to spectroscopic analysis, I, 332.
- Novoselova, A. I. See Markovitch, A. V.
- Novoshilova, O. J. See Bogdanov, S. V.
- Nowotny, H., and Wesenberg, H., strontium-aluminium system, I, 156.
- and Winkel, A., surface structure of β -brass, I, 205.
- Wormnes, E., and Mohrnhelm, A., systems aluminium-calcium, magnesium-calcium, and magnesium-zirconium, I, 206.
- Noyes, W. A., jun. See Henriques, F. C., jun., and Herr, D. S.
- Noyons, A. K. M., and Goor, H. van, action of glucose on cerebral metabolism, III, 433.
- See also Dijkstra, C.
- Nozaki, K. See Young, W. G.
- Nudenberg, W. See Kharasch, M. S.
- Nukada, S., and Okutani, M., fluctuation in resistance after immunisation with hetero-bacteria, III, 829.
- Numata, I., determination of glutathione in tissues, III, 779.
- and Matsukawa, D., colorimetric micro-determination of copper, I, 373.
- Nunheimer, T. D., and Fabian, F. W., influence of organic acids, sugars, and sodium chloride on strains of food-poisoning staphylococci, III, 936.
- Nunn, L. C. A. See Hume, E. M., and Maclean, I. S.
- Nunnemacher, R. F., studies on cartilage plates in long bones of rat, III, 371.
- Nusbaum, C., precision X-ray camera for high temperatures, I, 375.
- Nussbaum, C. See Golob, M.

- Nussey, A. M. See Morton, F.
 Nutter, J. A., fasciotomy for chronic sciatica and backache: analysis of end-results, III, 198.
 Nutter, P. B. See Kirsner, J. B., and Palmer, W. L.
 Nutting, G. C., Long, F. A., and Harkins, W. D., change with time of surface tensions of solutions of sodium cetyl sulphate and sodium lauryl sulphate, I, 356.
 See also Meehan, E. J.
 Nutting, M. D. F. See Elden, C. A.
 Nutting, P. G., association of magnesia with silica in a pure magnesium clay, I, 397.
 Nuys, R. G. van. See Moody, R. O.
 Nyboer, J., cardiac disease in rabbit, III, 841.
 See also Flexner, J.
 Nydahl, F., and Arnielt, H., removal of carbon dioxide from distilled water, I, 298.
 Nygaard, E. See Haraldsen, H.
 Nygaard, K. K., prophylactic and curative effect of vitamin-K to hemorrhagic disease of the newborn, III, 880.
 Nylén, C. O. See Berlin, R.
 Nyman, G. A. See Komppa, G.
 Nynäs, O., temperature corrections in p_H determinations with the glass electrode, I, 272.
 Nysewander, C. N., Sage, B. H., and Lacey, W. N., phase equilibria in hydrocarbon systems. XXVII. Propane-n-butane system in the critical region, I, 117.

O.

- Oag, R. K., preservation of *Borrelia duttoni* by freezing, III, 168. Resistance of bacterial spores to dry heat, III, 773.
 Oak, L., and Sloane, A. E., Beths visual sensation and perception tests, III, 116.
 Oakley, C. L., and Warrack, G. H., immunity and antibody to influenza in mice, III, 268. Blood volume of mouse, III, 470.
 See also Parish, H. J.
 Oard, H. C., Campbell, C. R., and Dealy, F. N., traumatic complications in peripheral vascular disease, III, 294.
 Obata, T., alkaloids of the fruit of *Oriza japonica*, Thunb., II, 111.
 Obata, Y., synthesis of α - and β -glycerophosphoric acid, II, 151. Bromination of pyromucic acid, II, 229. Hydroxylation of furan ring, II, 229.
 Oberdalloff, M., detection of silica-containing dust in lung tissues by means of fluorescence microscopy, III, 158.
 Oberst, F. W., specific volume of plasma- and serum-proteins in pregnant and in parturient women and their newborn children as derived from viscosity measurements, III, 381.
 and Plass, E. D., blood changes induced by venesection in women with toxæmia of late pregnancy, III, 627.
 Oblad, A. G., Marschner, R. F., and Heard, L., catalytic dehydrogenation of representative hydrocarbons, I, 416.
 Obo, F. See Itoh, Ryoji.
 O'Brien, A. S. See Kolthoff, I. M.
 O'Brien, A. T. See Mack, P. B.
 O'Brien, B., and Morgareidge, K., effect of phosphorus on biological determination of vitamin-D, III, 324.
 and Stewart, H. S., jun., photo-mechanical method for determination of atmospheric ozone, I, 393.

- O'Brien, B. See also Stewart, H. S., jun.
 O'Brien, H. C., and Hancey, R. T., plastic cover glass, isobutyl methacrylate, III, 786.
 O'Brien, J. R. See Carter, C. W.
 O'Brien, K. L. See Mitchell, H. S.
 O'Brien, R. A., bacillary dysentery: treatment and prophylaxis, III, 599.
 O'Brien, S. J., and Byrne, J. B., partial pressure of hydrogen chloride from its solutions in monohalogenobenzenes at 25°, I, 406.
 and Kenny, C. L., partial pressure of hydrogen chloride from its solutions in *o*-nitrotoluene, *m*-nitrotoluene, and *n*-hexane at 25°, I, 316.
 O'Bryan, H. M., structure of the *L* absorption of sodium and its halides, I, 305.
 Occhialini, E. See Cavalli, F.
 Occhialini, G., β -radioactivity of rubidium, I, 382.
 Ochiai, E., polarisation in heterocyclic rings having aromatic character. IX. Friedel-Crafts reaction of basic, aromatic, heterocyclic [compounds], II, 332.
 and Hou, F. Y., synthesis of thiazoloxaloxaline derivatives. II, II, 332.
 and Irai, I., naphthyridine derivatives. III. Constitution of dihydroxyquinoxypyrin; alcoholysis of quinolinimide, II, 105.
 Ito, Y., and Maruyama, M., constitution of matrine. XXII. Gen-alkaloids of matrine and *d*-lupanine, II, 238.
 and Nishizawa, T., polarisation in heterocyclic rings with aromatic character. VIII. Polarisation in the benzene ring, II, 237.
 and Sibata, M., polarisation in heterocyclic rings with aromatic character. IV. Polarisation in the glyoxaline ring, II, 234.
 Tamamushi, Y., and Nagasawa, F., synthesis of derivatives of 4:5'-dithiazolyl and 4:5'-glyoxalylthiazole, II, 291.
 Tunoda, Y., Nakayama, I., and Masuda, G., polarisation in heterocyclic rings with aromatic character. V. Substitution of aromatic hetero-rings with directly united phenyl chain, II, 237.
 and Yoshida, S., alkaloids of the morphine group. I. Synthesis of aminocodide, II, 111.
 Ochoa, S., magnesium in pyruvate oxidation system of brain, III, 148. "Coupling" of phosphorylation with oxidation of pyruvic acid in brain tissue, III, 636. Nature of oxidative phosphorylation in brain tissue, III, 843.
 Peters, R. A., and Stocken, L. A., acetyl phosphate and pyruvate oxidation, III, 148.
 and Rossiter, R. J., flavin-adenine dinucleotide in rat tissues, III, 165. Adrenal cortex and phosphorylation of vitamin-B₁, III, 306. Flavin-adenine dinucleotide in tissues of rats on diet deficient in flavin, III, 513.
 See also Banga, I.
 Ochs, (Mlle.) L., Guéron, J., and Magat, M., Raman spectra of aqueous solutions of gaseous hydrogen chloride, I, 243.
 Ochsner, A., and DeBakey, M., vasospasm in thrombophlebitis, III, 294.
 and Smith, M. C., vitamin-B₁ for relief of pain in varicose ulcers, III, 593.
 See also DeBakey, M.

- Ockrent, C., and Banks, W. H., surface potential changes of thin films in the transformation liquid to solid, I, 351.
 O'Colla, P. See Dillon, T.
 O'Connor, F. J. See Ecker, A. D.
 O'Connor, J. M., significance of unimolecular layers of fatty acids in the control of animal oxidation, III, 56.
 O'Connor, M. J. See Campbell, K. N.
 O'Connor, R. C., mechanism of fermentation of trehalose by *Fusarium lini*, Bolley, III, 767.
 O'Connor, R. J., experimental study of development of amphibian cloaca, III, 552.
 O'Connor, W. F. See Drumm, P. J.
 O'Connor, W. J. See Eccles, J. C.
 Oda, R., action of nitric acid on anthracene. I. Action of nitric acid on anthracene in organic solvents, particularly acetic acid. II. Influence of various addenda on the action of nitric acid on anthracene in acetic acid. III. Mechanism of occurrence of 2:7-dinitroanthraquinone. IV. [Nitroanthraquinones], II, 123, 227.
 O'Day, K., fundus and fovea centralis of the albatross (*Diomedea cauta cauta*, Gould), III, 574.
 Oddie, T. H., γ -ray measurement of radium, I, 52.
 Oddo, B., methylenedisalicylic acid and its hexamethylenetetramine salt, II, 278.
 and Raffa, (Signa.) L., pyrrole-indole group. Series II. XXVI. Dehydrogenation by means of sulphur: 3:3-di-indolyl from indole, II, 56.
 Oddy, J. G., and Evans, D. G., effects produced by toxic and non-toxic extracts of *H. pertussis* and *Br. bronchiseptica* on blood-sugar of rabbits, III, 188.
 Odeneal, T. H., significance of orbit level in muscle balance, III, 396.
 Odenwald, R., viscosity dispersion of the dielectric constants of organic liquids at very high frequencies ($\lambda = 15$ cm.), I, 98.
 Odum, E. P., and Kendeigh, S. C., cardiobromometer: new instrument for measuring heart rate and other body activities of animals, III, 708.
 O'Dwyer, M. H., hemicelluloses of wood of English oak. V. Structure of hemicellulose B, III, 368.
 Oehme, C. See Bentz, W.
 Öhnell, R. See Fisher, K. C.
 Oelgoetz, A. W., determination of p_H of body fluids [by measuring p_H of colonic contents in faeces], III, 38.
 Oelke, W. C., identification of ferrocyanide ion, I, 394.
 Oelkers, H. A., pharmacological activity of morphine and its derivatives, III, 602. Action of rare earths, III, 603.
 Oeller, H., action of depot insulin preparations after single daily injections, III, 413.
 Øllgaard, E. See Bjering, T.
 Ömer, K., medicinal and drinking waters from Havza, I, 237.
 Örtenblad, B. See Myrbäck, K.
 Oesterlin, M., chemistry and biochemistry of tumours, III, 591.
 Oestreicher, E. See Grube, G.
 Oestreicher, F., and Kok, D. J. anthelmintic action of oxidising substances, III, 440.
 See also Waterman, L.
 Oettel, H., clinical use of *Digitalis lanata*, III, 523.
 Öz, T. V., new meningotomoxoid, III, 75. Tularemia endotoxin, III, 869.

- Offringa, J. See Brummelkamp, R.
- Ofutt, E. B. See McHargue, J. S.
- Oficjalski, P., application of electrodialysis to isolation of alkaloids. I. From raw materials and their pharmaceutical products. II. In toxicological analysis for strychnine, II, 200.
- O'Flaherty, F. See Roddy, W. T.
- Ogaard, A. T. See Goldsmith, G. A.
- Ogata, A., and Kawakami, I., male hormone. XI. Activator, II, 34.
- and Minato, A., constituents of turtle oil. I, 1, 111, 814.
- Morimoto, K., and Mori, F., constituent of earthworm as antipyretic, III, 602.
- and Tanaka, T., apparatus for determining carbon dioxide exhaled by animals for evaluation of thyroid hormone, III, 832.
- Ogata, D., Yoshida, F., and Akahane, T., effect of stimulation and paralysis of inner ear on rate of lymph-hearts, III, 26.
- Ogata, K. See Okuda, T.
- Ogawa, H., facial muscles of Japanese twin embryos, III, 178.
- Ogawa, M., glutathione. X. Effect on fever and glycolysis. IX. Effect on narcotism. XII. Effect on alcoholism, III, 57, 334, 602. Relation between administration of diet and glutathione content of arterial and venous blood, III, 882.
- Ogawa, T., Matsui, A., Nagai, H., and Senoo, H., oxidation of methane. III, 11, 335.
- Ogden, E., Brown, L. T., and Page, E. W., increased sensitivity of arterial muscle in prehypertensive phase of experimental renal hypertension, III, 886.
- Hildebrand, G. J., and Page, E. W., rise of blood pressure during ischaemia of the gravid uterus, III, 475.
- and Shook, N. W., voluntary hypercirculation, III, 189.
- See also Page, E. W.
- Ogilvie, W. H. See Morley, J.
- Ogle, K. N., relative size of ocular images of the two eyes in asymmetric convergence, III, 117. Induced size effect. III. The phenomenon as influenced by horizontal disparity of fusion contours, III, 117. Induced size effect with eyes in asymmetric convergence, III, 640.
- Ogonuki, H., vi antigen of *Salmonella paratyphi C*, III, 771. Acid agglutination in *Salmonella* group, III, 771.
- and Miyata, T., relationship between acid agglutination and specific agglutination of *B. typhosum*, III, 772.
- Ogston, A. G., Philpot, J. St. L., and Zuckerman, S., swelling of sexual skin in rhesus monkeys, III, 580.
- Ogura, T., silver, lead, and zinc deposits of Manchuria, I, 304.
- Ogura, Y., dehydrogenases of moulds. I. Anoxytropic glucose dehydrogenase from *Aspergillus oryzae*, III, 343.
- Ohara, K. See Sakaguchi, K.
- Ohashi, T., unit cell and space-group of β -octamethylcellobiose and β -hendecamethylcellobiose, I, 151.
- Ohle, H. See Mahr, C.
- Ohlin, P., determination of h/e , I, 144.
- Ohlson, M. A. See Leichsenring, J. M.
- Ohm, J., nystagmus. XLVII. Pendular nystagmus of very high frequency in albino, III, 488.
- Ohno, K., glycogen and lipins during various conditions of nutrition, III, 749.
- See also Yasuda, Morio.
- Ohno, S. See under Ono, Setuo.
- Ohta, K., excretion of bile acids after extirpation of adrenal glands, III, 137.
- Constituents of a fish bile, III, 137.
- Ohta, S., liver-fat during starvation, III, 743. Nervous influence on occurrence of fatty liver due to poisoning, III, 743.
- Ohta, T., liver-cell regeneration and butterfly carcinogenesis, III, 669.
- Ohyagi, Y., absorption spectra of polynuclear complex salts, I, 344.
- Ojerholm, E. See Roberts, J. L.
- Okabe, K. See Goto, K.
- Okada, T., and Tamura, M., condensation hygrometer, I, 377, 395.
- Okajima, S., refractive indices of cellulose film. I. Determination of refractive indices of mica as a model of the cellulose film with Abbé refractometer, I, 394.
- Okamoto, H., effect of quaternary ammonium compounds and tertiary amines on chain growth of pneumococci; use of diethylaminoethanol as substitute for choline, III, 935. Increase of power to form haemolysis by *Streptococcus haemolyticus* in presence of nucleic acid, III, 936.
- Okamoto, S., nickel-beryllium constitutional diagram, I, 318.
- Okayama, Taisuke. See Yukawa, H.
- Okayama, Tosiro. See Sugawara, S.
- Okazaki, A., Faraday effect and conductivity of electrolytic solutions, I, 316. Faraday effect of strong electrolytes in aqueous solutions. VII: NH_4Cl , BaCl_2 , NaNO_3 , KNO_3 , Na_2SO_4 , ZnSO_4 , and NaClO_4 , I, 316.
- Okazaki, K., elimination of methyl from *o*-methoxyacetophenone and action of potassium hydrogen carbonate on resacetophenone and its derivatives, II, 223.
- Okita, M. See Suzue, K.
- Okkels, H., and Sand, K., nerves of testis and interstitial gland, III, 280.
- Oknin, I., electrochemical investigation of effect of organic oxidising agents on corrosion of metals in acid media, I, 169.
- Okoti, N., bios. II, 111, 350.
- Okuda, O. See Horiuchi, R.
- Okuda, T., Ogata, K., Aoki, K., and Sugawara, Y., isotopic weights of chlorine, argon, and iron, I, 425.
- Okulitch, O., microbial dissociation of lactic acid streptococci, III, 76.
- Okumura, R., influence of temperature and drugs on action of thyroxine on body temperature, III, 123.
- Okunuki, K., gaseous metabolism of pollen. II. III. Dehydrogenases from pollen grains, III, 343.
- and Yakushiji, E., rôle of diaphorase in interaction of cytochrome-*b* and dehydrogenase system, III, 765.
- Okutani, M. See Nukada, S.
- Olbrich, S., immunisation method with rabbits for preparation of especially active anti-*N*-serum for blood-group diagnosis, III, 359.
- Oldberg, E. See Ury, B.
- Oldenberg, O., and Sommers, H. S., jun., thermal reaction between hydrogen and oxygen. I. Comparison of experiments and theory, I, 363.
- Oldham, F. E. See Geiling, E. M. K.
- Oldham, F. K., Last, J. H., and Geiling, E. M. K., distribution of melanophore-dispersing hormone in anterior lobe of cetaceans and armadillo, III, 641.
- Oldham, H., and Schlutz, F. W., effect of different levels of vitamin-*B*, and iron on retention of iron and on fat content of normal young rats, III, 914.
- Oldham, J. W. H., and Ubbelohde, A. R., melting and crystal structure, I, 431.
- Oldham, W., and Johns, I. B., electron-sharing ability of organic radicals. X. α -Substituted tetrahydroquinolines, II, 106.
- O'Leary, J. S. See Bishop, G. H.
- O'Leary, P. A. See Brunsting, L. A.
- O'Leary, W. J. See Hazel, W. M.
- Oleson, J. J., Elvehjem, C. A., and Hart, E. B., nutritional achromotrichia, III, 234. Spectacled eye condition in rats, III, 488.
- Woolley, D. W., and Elvehjem, C. A., is pantothenic acid essential for growth of rats? III, 234.
- See also Nielson, E.
- Oleson, N. L., multiple scattering of fast electrons, I, 51.
- See also Crane, H. R.
- Olhagen, B., auto-inhibition in Wassermann's reaction, III, 359.
- Olin, G. See Kling, C.
- Oliphant, M. L. See Aston, F. W.
- Olitsky, P. K., and Morgan, I. M., active and passive immunity resulting from inoculation of formalinised inactivated and of active virus of equine encephalomyelitis, III, 690.
- Oliva, V. See Sagastume, C. A.
- Oliver, E. A. See Schwartz, Louis.
- Oliver, J. D. See Brewer, H. F.
- Oliver, J. O., toxicity of solutions used for producing local anaesthesia, III, 64.
- See also Downman, C. B., and Sorsby, A.
- Oliveri-Mandalà, E., and Deleo, E., reactions in sunlight. IV. 11, 211.
- Oliverio, A., etherification and hydrolysis [of ethers] of nitrophenols, II, 167.
- Oliver, H. R. See Bonet-Maury, P.
- Olken, H. G. See Stellar, L. I.
- Ollano, Z., neutron sources consisting of a radium salt mixed with beryllium, I, 242.
- Ollivier, H. See Mosinger, M.
- Olmer, D., Olmer, J., Jouve, X., and Vague, J., adrenaline and auriculo-ventricular block, III, 14.
- Olmer, J. See Olmer, D., and Roche, J.
- Olsted, J. M. D. See Morgan, M. W., jun.
- Olsen, A., structure of proteins, II, 263.
- Olsen, A. G. See Stuewer, R. F.
- Olsen, A. L., filter aids, I, 378.
- Olsen, C., absorption of calcium and formation of oxalic acid in higher green plants, III, 270.
- Olsen, J. S. See Titus, A. C.
- Olsen, M. W. See Godfrey, A. B.
- Olson, A. R., and Youle, P. V., strength of carbonic acid; rate of reaction of carbon dioxide with water and hydroxyl ion, I, 321.
- Olson, C., and Levine, P. P., cellular elements and haemoglobin in blood of chickens experimentally infected with *Capillaria columbae* (Rud.), III, 75.
- Olson, E. C. See Hutton, J. H.
- Olson, F. C., and Palmer, L. S., comparison of a chemical and a biochemical method for determining the biological value of proteins; evaluation of endogenous nitrogen, III, 917.
- Olson, K. B., effect of sesame oil (*T*-factor) on platelet count, III, 10.
- See also Chargaft, E., and Gutman, A. B.
- Olson, L. See Cornog, J.
- Olson, M. B. See Shepherd, M. L.
- Olson, O. E. See Dubois, K. P., and Moxon, A. L.
- Olson, P. See McClendon, J. F.

- Olson, W. See Necheles, H.
 Olson, W. H. See Neuwelt, F.
 Olsson, E. See Rochester, G. D.
 Olsson, K. See Hedvall, J. A.
 Omori, S. See Sakurai, Y.
 Omoti, S., and Kitayama, T., connexion of bile canaliculi and bile ducts, III, 177.
 Oncley, J. L. See Mehl, J. W.
 O'Neal, R. D., and Goldhaber, M., decay constant of ^3H , I, 426.
 Oneto, J. F., and Way, E. L., sulphophenylarsinic acids and their derivatives. III. *p*-Sulpho- and *p*-sulphonamidodiphenylarsinic acids, II, 360.
 Ono, M. See Takei, S.
 Ono, S. See Otani, T.
 Ono, Setuo. See Kondo, H.
 Ono, Sozaburo, disintegration of starch paste by irradiation with ultrasonic waves, I, 357. Pectic acid, II, 323.
 Ono, T., hydrolysis of fats and fatty acid esters. IV.—VIII., I, 260; II, 266; III, 346, 533.
 Oohira, T., polypeptide from *Eisenia bicyclis*. II. and III. Structure of eisenin, III, 367, 695.
 Oomi, S. See Takagi, S.
 Oosaka, H., molecular structure of fluorobenzene and *o*-difluorobenzene by electron diffraction, I, 200.
 Oosten, R. P. van. See Backer, H. J.
 Oostveldt, M. van. See De Nayer, P. P.
 Oparina, O., gravimetric determination of sodium in natural waters with zinc uranyl acetate, I, 329.
 Opatowski, I., allowed directions of cosmic rays as an existence problem of mathematical analysis, I, 53.
 Opechowski, W., exchange interaction in magnetic crystals, I, 13.
 and De Vries, D. A., isotope shift in the boron spectrum, I, 1.
 See also Becquerel, J.
 Openshaw, H. T. See Blount, B. K.
 Opie, J. W. See Evans, H. M.
 Opitz, C. See Hölftje, R.
 Opitz, E. See Benzinger, T., and Gremer, H. D.
 Opitz, H., alimentary and post-infection anemia in children, III, 181.
 Oppel, T. W. See Hardy, J. D.
 Oppen, L. von, inflammatory changes following injection of protein into the ear of normal and sensitised rabbits, III, 294.
 Oppenheimer, A., pseudo-megacolon, III, 663.
 Oppenheimer, B. S. See Abramson, D. I.
 Oppenheimer, E. See Friedman, B.
 Oppenheimer, E. H., congenital atresia of pancreatic duct with cystic fibrosis of the pancreas, III, 742.
 Oppenheimer, E. T. See Blumenthal, B.
 Oppenheimer, J. M., non-specificity of germ layers, III, 372.
 Oppenheimer, J. R., and Schwinger, J., pair emission in proton bombardment of fluorine, I, 52.
 and Snyder, H., production of soft secondaries by mesotrons, I, 143.
 Oppenlander, J. D. See Shriner, R. L.
 Oppenorth, W. F. F., photo-inactivation of auxin in the coleoptile of *Avena* and its bearing on phototropism, III, 174.
 Oppen, L., incidence and morphology of epithelial cysts in anterior lobe of hypophysis of the rat, III, 701.
 Opsahl, J. C. See Arnow, L. E., and Clark, W. G.
 Opsahl, R., haematopoiesis and endogenous uric acid, III, 282.
 Orcutt, R. M., and Bogert, M. T., synthesis of 2-methylphenanthrene from *l*-menthone, II, 10.
 Ordal, Z. J. See Savage, G. M.
 Ordstrand, H. S. van, idiopathic spontaneous pneumothorax, III, 887.
 O'Reilly, H. See Conway, E. J.
 Orékhev, A. P. See Junusov, S., and Konovalova, R. A.
 Orelli, E. von. See Guyer, A.
 Orenstein, L. L. See Bowman, K. M.
 Orent-Keiles, E., rôle of boron in diet of rat, III, 749.
 and McCollum, E. V., mineral metabolism of rats on sodium-deficient diet, III, 435.
 Oreste, P., contractility of human ovary, III, 126.
 Orestov, I. L., behaviour of a platinum electrode in presence of foreign ions, I, 75. Behaviour of a platinum electrode during precipitation of barium sulphate, I, 75.
 Orias, O. See Álvarez, F. G.
 Orinstein, E. See Benda, R.
 Oriol, A., apparatus for determining total carbon [in histological fluids], III, 274. Micro-gasometric apparatus, III, 274.
 Orlenko, A. F. See Djatschkovski, S. I.
 Orley, A., radiotherapy of intracranial tumours with special reference to treatment of pituitary tumours, III, 298.
 Orlov, J. A., structure of extremities of *P. ratatidea crassa*, Zdansky, III, 85. Structure of extremities of *Crocota eximia*, Roth et Wagner, III, 85. Dentition and extremities of *Ictitherium hipparionum*, Gervais, III, 85.
 Orlova, N. I. See Danilov, S. N.
 Ormont, B., maximum valency of elements of group VIII, I, 197.
 See also Mitzelevski, E. S.
 OrNSTEIN, E. A. See Eidelberg, J.
 OrNSTEIN, L. S., theory of paramagnetic relaxation, I, 200.
 and Milatz, J. M. W., accidental deviations in conduction of heat, I, 65.
 Orowan, E., plastic gliding, I, 247.
 Orr, H., chemotherapy of acquired syphilis, III, 522.
 Orr, I. M., and Rao, M. V. R., pathogenesis of peptic ulcer in Indians, III, 133.
 Orr, J. H. See Reed, G. B.
 Orr, J. W., histology of rat's liver during course of carcinogenesis by butter-yellow, III, 669.
 Orr, W. J. C., adsorption of non-polar gases on alkali halide crystals, I, 158.
 Orrù, A., water-permeability of vitelline membrane of hen's egg, III, 125. Effect of nicotinic acid and its derivatives on blood pressure, III, 233. Action of nicotinamide on erythrocyte and leucocyte [counts] of normal animals, III, 556. Water-permeability of vitelline membrane of hen's egg, III, 648.
 Országh, O., and Alködy, J., coagulative serum produced by hirudin, III, 284.
 Orten, J. M., and Devlin, H. B., diabetes in rats and its alleviation with sodium chloride, III, 327.
 See also Smith, A. H.
 Orth, O. S. See Stutzman, J. W.
 Ortiz-Velez, J. M. See Fischer, Hans.
 Ortoleva, G. See Cannavò, L.
 Orton, J. H. See Jones, J. W.
 Osawa, A., and Shibata, N., equilibrium diagram of the copper-antimony system. IV. X-Ray investigation of copper-antimony alloys, I, 205. Structural changes due to quenching and tempering of β -phase alloys of the copper-antimony system, I, 205.
 Osborn, E. F., structural petrology of the Val Verde tonalite, S. California, I, 45.
 Osborn, G. See Bachmann, W. E.
 Osborn, G. R. See Lescher, F. G.
 Osborn, J. M. See Williams, Jonathan W.
 Osborn, T. W. B., and Gear, J. H. S., possible relation between ability to synthesise vitamin-C and reaction to tubercle bacillus, III, 751.
 Osborne, D. W., Doeseher, R. N., and Yost, D. M., entropy of dimethyl sulphide from low-temperature calorimetric measurements; restricted rotation of the methyl groups, I, 353.
 Garner, C. S., and Yost, D. M., entropy of dimethylacetylene from low-temperature calorimetric measurements; free rotation in the dimethylacetylene molecule, I, 104.
 Osborne, E. D. See Jordan, J. W.
 Osborne, F. F., Montauban mineralised zone, Quebec, I, 136.
 Osborne, N. S., heat of fusion of ice, I, 154.
 Osborne, R. L., sympathomimetic drugs, III, 439.
 Osborne, S. L. See Puntenney, I.
 Ose, S. See Akabori, S.
 Oserkowsky, J., and Thomas, H. E., exanthema in pear and copper deficiency, III, 943.
 Osgood, E. E., marrow cultures, III, 276. Effectiveness of neosarphenamine, sulphanilamide, and sulphapyridine in marrow cultures with staphylococci and α -streptococci, III, 436.
 Baker, R. L., Brownlee, I. E., Osgood, M. W., Ellis, D. M., and Cohen, W., total differential and absolute leucocyte counts and sedimentation rates of healthy children 4 to 7 years of age; standards for children 8 to 14 years of age, III, 91, 629.
 and Bracher, G., culture of human marrow; effects of X-rays, III, 374.
 Riddle, M. C., and Mathews, T. J., aplastic anaemia treated with daily transfusions and intravenous marrow, III, 282.
 See also Bullowa, J. G. M.
 Osgood, M. W. See Osgood, E. E.
 Osgood, R. See Robinson, L. J.
 O'Shaughnessy, L., Mansell, H. E., and Slome, D., haemoglobin solution as blood substitute, III, 92.
 Oshima, H. See Kuroda, C.
 Oshima, Y., and Hayasi, Kaneo, oxidation of tea tannin by enzymes in fresh tea leaf, III, 867.
 See also Ishii, M.
 Oshry, H. I. See Ballard, J. W.
 Osima, See under Oshima.
 Osmond, T. E., modified Kahn test, III, 542.
 Osswald, K., measurement of conductivity and dielectric constants of biological tissues and fluids with short waves, III, 763.
 Ostádal, B., Visscher-Bowman pregnancy test, III, 905.
 Osteen, O. L. See Stein, C. D.

- Oster, R. H. [with Kemp, E. J.], electro-dialysis of tissue-chloride. I, III, 42. and Amberson, W. R., electro-dialysis of tissue-chloride. II, III, 42.
- Osterberg, A. E. See Amberg, S., Baggenstoss, A. H., Butt, H. R., Comfort, M. W., Cragg, R. W., Drips, D. G., Jenovese, J. F., Maclay, E., Snell, A. M., Wilson, R. B., and Ziegler, E. R.
- Osterberg, H. See Roebuck, J. R.
- Ostergaard, E. See Rydberg, E.
- Osterhout, W. J. V., calculations of bioelectric potentials. VI. Effects of guaiacol on *Nitella*, III, 160. Chemical aspects of potassium effect, III, 531. Effects of hexylresorcinol on *Nitella*, III, 684. Effects of guaiacol and hexylresorcinol in presence of barium and calcium, III, 864.
- and Hill, S. E., action curves in *Nitella* in relation to movement of potassium, III, 825.
- and Murray, J. W., water in non-aqueous solutions, I, 117. Behaviour of water in heterogeneous systems, III, 530.
- Ostern, P., Herbert, D., and Holmes, E., glycogen metabolism in liver, III, 40.
- and Holmes, E., formation and breakdown of glycogen in liver, III, 57.
- Osterwald, K. H., strophanthin and coronary circulation, III, 153.
- and Meurer, H., effect of strophanthin on blood vessels and cardiac output, III, 62. Different effects of euphylline and deryphylline, III, 62.
- Ostrum, H. See Metzger, H. N.
- Osumi, S. See Fujii, K.
- Oswald, A., diseases of the skeletal muscles and internal secretion, III, 197.
- Oswald, W., serological antigen analysis of inoculation tumours, III, 829.
- Ota, R. K. See Beckman, H.
- Otani, T., Usio, S., and Ono, S., cathodal depression in refractory period of nerve, III, 797.
- Otero, P. M. See under Morales-Otero, P.
- Othmer, D. F., correlating vapour pressure and latent heat data; a new plot, I, 314.
- and Kern, D. Q., thiodiglycol; unit process and operations involved in its synthesis from ethylene oxide and hydrogen sulphide, II, 117.
- Otila, E. See Elo, O.
- Otis, L., and Smith, M. C., sex variation in utilisation of iron by anæmic rats, III, 376.
- Otsuki, H. See Horiuchi, R.
- Ott, Earl. See Bliss, E. A.
- Ott, Erwin, and Brugger, W., activation of aluminium chloride in the Friedel-Crafts reaction by chlorides of elements in the fourth group of the periodic system, I, 326.
- Ott, L. See Eisenman, A. J.
- Ott, L. H., Tennant, R., and Liebow, A. A., adaptable rotating unit for roller tube tissue cultures, III, 837.
- Ottaviani, G., and Binotto, A., regeneration of central stem of obturator nerve grafted in bladder wall, III, 466.
- and Cavazzana, P., Cajal's interstitial cells, III, 534.
- Ottensooser, F. See Willenegger, H.
- Otto, G. F., serum antibody against *Ancylostoma caninum*, III, 456.
- and Landsberg, J. W., diet and iron in hookworm infections, III, 456.
- Otto, Hans, lungs affected by ochre dust, III, 159.
- Otto, Hans, and Hahn, G., capillary microscopy in early cases of lead poisoning, III, 253.
- and Kuhlmann, F., alimentary tract in lead poisoning, III, 134. Gastro-intestinal tract, especially disturbance of intestines, in lead poisoning, III, 257.
- Otto, Harold. See Gold, H.
- Otto, M. See Thomas, R. M.
- Ouellet, C. See Potvin, R.
- Oughterson, A. W., Tennant, R., and Lawrence, E. A., tumour response and stroma reaction following X-ray of transplantable tumour in inbred strains of mice, III, 590.
- Ouissin, J., quaternary system calcium hypochlorite-calcium chloride-calcium hydroxide-water, I, 257.
- Outhouse, E. L. See Bowers, R. V., and Forbes, J. C.
- Outland, T., and Hanlon, C. R., procaine hydrochloride in fractures and sprains, III, 603.
- Ouyang, G., use of purified protein derivative in tuberculin patch test, III, 613.
- Ovakimian, G., Christman, C. C., Kuna, M., and Levene, P. A., reaction of the esters of *d*-leucine and *l*-leucine on Raney catalyst, II, 269.
- Kuna, M., and Levene, P. A., reduction of α -amino-esters to alkamines in presence of Raney nickel, II, 170. Reaction of the esters of phenylglycine and phenylalanine on Raney catalyst, II, 328.
- Overbeck, C. J., recent American advances in apparatus and in technique of experimental physics, I, 134.
- Overbeck, G. A., influence of liver extract on oxygen consumption of mammalian erythrocytes. I. Properties of the constituents of the system. II. Influence of cyanide and narcotics, III, 90.
- See also Gaillard, P. J., and Ruitinga, P.
- Overbeek, J. van, auxin distribution in seedlings; bearing on problem of bud inhibition, III, 174. Traumatic acid and thiamin as growth factors for algae, III, 872. Auxin production in seeds of dwarf maize, III, 943.
- Brantley, L. R., and Potapenko, G., effect of ultra-short radio waves on plant growth, III, 72.
- Overbeek, J. T. G., relation between the specific inductive power of hydrated colloids and their hydration, I, 211.
- See also Kruyt, H. R.
- Overhoff, J., action of benzyl alcohol on peptides and proteins, II, 199.
- See also Wibaut, J. P.
- Overholser, M. D. See Harsh, R.
- Overley, C. A. See Black, H. C.
- Overman, O. R. See Garrett, O. F.
- Overstreet, R., and Broyer, T. C., absorption of radioactive isotopes by living tissues as illustrated by experiments with barley plants, III, 692.
- See also Jenny, H.
- Overstreet, R. M. See Abbott, O. D.
- Ovetschkin, S., time factor in phosphate nutrition of spring wheats, III, 615.
- Ovtschinskova, E. N. See Michnevitsch, G. L.
- Owen, C. A. See Mertz, E. T., and Smith, H. P.
- Owen, E. A., structure of meteoric iron, I, 333.
- Owen, E. A., and Burns, B. D., X-ray study of meteoric iron, I, 44.
- and Rowlands, V. W., solubility of elements in copper and in silver, I, 437.
- Owen, E. C. See Thomson, A. M.
- Owen, (Miss) K. See Quayle, O. R.
- Owen, V. A. See Ziffren, S. E.
- Owens, H. S., viscosities of arabogalactan solutions, II, 207.
- Owens, J. S., quantitative absorption spectrophotometry; internal control method, I, 133.
- Owens, L. B., and Mills, C. A., influence of season on severity of diabetes and its [arterio-]sclerotic complications, III, 565.
- and Rockworn, S. S., prognosis in diabetic coma, III, 413.
- Owens, N. A. See Smith, A. de G.
- Owens, R. G., and Barker, E. F., infra-red absorption spectrum of methylamine, I, 194.
- Oxford, A. E. See Clutterbuck, P. W.
- Oxman, M. F. See Newell, J. M.
- Oyama, N., influence of sodium bicarbonate on oxygen consumption of illuminated retina of the rabbit *in vitro*, III, 490.
- Oyama, Y., and Iwase, K., absorption of gas in the form of bubbles, I, 67.
- Ozansoy, M. See Arndt, F.
- Ozegowski, W. See Theilacker, W.

P.

- Pabst, A., formula and structure of ralonite, I, 85. Cryptocrystalline pyrite from Alpine Co., California, I, 379.
- Pace, D. M. See Mast, S. O.
- Pace, J. See Brooks, J.
- Pace, N., and Mackinney, G., absorption spectrum of hypericin, I, 93.
- Pacella, B. L., and Barrera, S. E., postural reflexes and grasp phenomena in infants, III, 715.
- See also Ferraro, A.
- Pacevitz, H. A. See Gilman, H.
- Pacheco, G., and Pères, J. N., hydrogen sulphide in bacterial cultures, III, 451. Effect of mucin on mechanism of infection; action on bacteriolysis, III, 455.
- Pack, G. T., and Anglem, T. J., tumours of the soft somatic tissues in infancy and childhood, III, 46.
- Packard, C., biological measurement of high-voltage rays, III, 825.
- Packendorff, K. G., condensation of ethylene oxides with malonic ester, II, 152. Action of halogen halides on α -dihydroxypentane- γ -dicarboxylolactone, II, 153.
- Packer, A. See Gellhorn, E.
- Packer, H. K. See Hume-Rothery, W.
- Packham, E. A. See Pitts, H. H.
- Pacsu, E., ketone sugar series. IX. Validity of Hudson's rules of isorotation in the *l*-sorbose series; β -ethylsorbose and its tetra-acetate, II, 6. Synthesis of 1- β -glucosidofructose, II, 365.
- and Trister, S. M., isopropylidene derivatives of the mercaptals of monosaccharides. V. 5:6-*iso*Propylidene derivative of *d*-galactose dibenzyl mercaptal and the 6-methyl derivative of *d*-galactose, II, 365.
- Wilson, E. J., jun., and Graf, L., ketone sugar series. X. Synthesis of a disaccharide, 1- β -glucosidofructose; structure of turanose and melezitose, II, 6.
- See also Scattergood, A.

- Padberg, L. R., and Martin, T., sodium nitrite poisoning, III, 254.
- Paddock, F. K., and Smith, K. E., platelets in pernicious anemia, III, 182.
- Paden, J. H., Corwin, A. H., and Bailey, W. A., jun., pyrrole series. IV. Dipyr-rylmethene which is a true intermediate in its own formation, II, 193.
- Padnos, E. See Feinberg, S. M.
- Padoa, E., sex differentiation in trout (*Salmo irideus*) after administration of follicular hormone, III, 3.
- Paemel, O. van. See Itterbeek, A. van.
- Paff, G. H., micro-method for digitalis assay, III, 862.
- and Johnson, B. B., reversibility of digitalis action, III, 759.
- Page, A. P. M. See Mackenzie, J. C. H.
- Page, B. H., and Wilson, C., acute mercurial poisoning, III, 681.
- Page, E. W., and Ogden, E., blood pressure of pregnant rabbits and its response to pitressin, III, 406.
- See also Ogden, E.
- Page, H. E. See Brown, R. H.
- Page, I. H., arterial hypertension from cellophane perinephritis, III, 191.
- Pressor action of renin, III, 386.
- Effect of chronic constriction of aorta on arterial blood pressure in dogs: attempt to produce coarctation of the aorta, III, 631.
- and Helmer, O. M., crystalline pressor substance (angiotonin) resulting from reaction between renin and renin-activator, III, 192.
- Helmer, O. M., Kohlstaedt, K. G., Fouts, P. J., Kempf, G. F., and Corcoran, A. C., substance in kidneys and muscle eliciting prolonged reduction of blood pressure in human and experimental hypertension, III, 711.
- See also Corcoran, A. C., Grace, I., and Kohlstaedt, K. G.
- Pagel, H. A., and Schroeder, W. A., transition temperatures of the liquid-solid phases of trimethyl phosphate, I, 360.
- Pagel, W., effect of serum on growth of tubercle bacilli in depth of liquid media, III, 266.
- Pagès, R., hypersecretion of follicle hormone and mammary insufficiency, III, 126.
- Paillard, H. See Briner, E.
- Pain, A. K. See Nag, N. C.
- Paine, W. G., and Nelson, E. E., concentrating capacity of kidney as revealed by injection of posterior pituitary extract, III, 406.
- Effect of posterior pituitary extract on concentration of urine secreted during osmotic diuresis in rabbit, III, 732.
- Painter, E. G., and Franke, K. W., decomposition of seleniferous proteins in alkaline solutions, II, 318.
- Painter, E. P., synthesis of amino-acids from benzamidomalonic ester, II, 70.
- Painter, J. M., Todd, T. W., and Kuenzel, W., roentgenographic study of normal pylorus and duodenal cap, III, 500.
- Painter, T. S., aceto-carmin method for bird and mammalian chromosomes, III, 374.
- Synthesis of cleavage chromosomes, III, 465.
- See also Yeager, C. H.
- Paist, W. D. See Fried, J.
- Pak, C., effect of hyperthyroidism on action of adrenaline and ephedrine, III, 208.
- Effect of pH on activity of adrenaline and ephedrine, III, 211.
- Pak, C., and Read, B. E., pharmacological action of antimony sodium thioglycollate and antimony thioglycollamide. I. Toxicity, III, 253.
- Pal, J. C., and Guha, B. C., combined ascorbic acid in plant foodstuffs. I, III, 235.
- Palache, C., and Fisher, D. J., gratonite—a new mineral from Cerro de Pasco, Peru, I, 334.
- and Gonyer, F. A., microlite and stibio-tantalite from Topsham, Maine, I, 379.
- Palfray, C. L., distillation apparatus with plane ground joints, without bungs, I, 395.
- Palfray, L. See Gault, H.
- Palinchak, S. See Ray, F. E.
- Palit, S. R. See Sen, H. K.
- Palitz, L. L., recording splenic volume changes in intact, unanesthetised dog, III, 100.
- Palkin, S. See Fleck, E. E.
- Pall, D. B. See Fowler, D. L., and Shehyn, H.
- Palladina, L. I., and Dubovtzeva, L. A., effect of work at high environmental temperatures on lactic acid and glycogen content, reducing power, and pH of rabbit muscles, III, 106.
- Palmer, A., excretion of hormones in case of habitual abortion, III, 213.
- Palmer, C. E. See Klein, H.
- Palmer, G. D., Lloyd, S. J., McLure, W. P., LeMaistre, N., Waring, W. S., and Bachman, L. W., reactions of sulphur and vapours of organic compounds at different temperatures, II, 270.
- Palmer, H. D. See Lukens, F. D. W.
- Palmer, H. W., acute idiopathic hæmatoporphyrin with acute ascending paralysis, III, 636.
- Palmer, L. S. See Hansen, A. E., Johnson, D. W., and Olson, F. C.
- Palmer, W. L., and Nutter, P. B., peptic ulcer and achlorhydria, III, 500.
- See also Kirsner, J. B., Klein, A. J., and Schindler, R.
- Palmgren, A., encephalography in children, III, 891.
- Palmquist, E. M., path of fluorescein movement in the kidney bean *Phaseolus vulgaris*, III, 457.
- Palumbi, G., and Verga, G., innervation of sino-aortic node in mole, III, 708.
- Pamfilov, A. V., and Fridman, K. S., kinetics of formation of lead titanate, I, 442.
- and Ivantscheva, E. G., titanium. XIV. Anatase and rutile structures in precipitates. XV. Polymorphous structures of titanium dioxide, I, 228, 405.
- See also Morozov, A. A.
- Pan, S. T., magnetic test for superstructure in permalloy, I, 20.
- P'an, S. Y., chronic effect of sulphanilamide in dogs and monkeys with particular reference to blood, III, 60.
- Gonadotrophic potency of anterior pituitary of thyroidectomised rats and rabbits, III, 731.
- See also Li, R. C.
- Pan, Y. D. See Kolthoff, I. M.
- Panagiotakos, P. C. See Milas, N. A.
- Panagopoulos, K. See Joachimoglu, G.
- Panayotopoulos. See Gajdos, A.
- Pandit, C. G., endemic fluorosis in S. India, III, 682.
- Pandya, K. C. See Manzur, M., and Mehra, R. K.
- Panflova, E. P., blood values of caracul sheep correlated with organic constitution, III, 5.
- Pang, K. H. See Zia, S. H.
- Panikkar, N. K., osmotic behaviour of *Palæmonetes varians*, Leach, III, 226.
- Osmotic properties of common prawn, III, 421.
- Influence of temperature on osmotic behaviour of crustacea and its bearing on problems of animal distribution, III, 852.
- Panizzi, L., new syntheses of isooxazolo-polycarboxylic acids. II. III. isooxazoletetracarboxylic acid, II, 195.
- Pankhurst, R. C., second positive band system of nitrogen, I, 275.
- Complex band spectrum associated with an oxide of silicon, I, 429.
- Pankratov, A. I., change in drop of potential at the air-solution interface as related to the age of the latter, I, 69.
- Pannekoek-Westenburg, S. J. E., and Veen, A. G. van, vitamin-B₁ content of [East Indian] foodstuffs determined by the bradycardia method, III, 233.
- Pannhorst, R., and Bartelheimer, H., effect of depot insulin on blood-sugar regulation, III, 413.
- Pannier, R., purkinje tissue of cat's auricle, III, 289.
- See also Goormaghtigh, N.
- Panouse-Pigeaud, (Mme.) M. L., and Cheffel, H., removal of iron with cupferron in colorimetric determination of lead with dithizone, I, 81.
- Pansch, F. N. See Randall, L. M.
- Panthier, R. See Giroud, P.
- Pantschenkov, G. M., and Davtjan, O. K., dielectric loss of nitrobenzene-benzene and ethyl alcohol-benzene mixtures, I, 204.
- Papanicolaou, G. N. See Ripley, H. S., and Shorr, E.
- Papapetrou, A., and Hönl, H., inner motion of the electron. II, I, 185.
- Papavassiliou, M. See Cheramy, P.
- Papazian, G. See Briner, E.
- Papazian, R., effect of adrenaline and pituitrin on diuresis, III, 419.
- See also Radovici, A.
- Pape, N. R. See Fuller, C. S.
- Papilian, V., and Russu, I. G., experimental changes in opsonic index, III, 9.
- Velluda, C. C., and Antonescu-Mazilu, F., action of drugs on hæmolysis and agglutination, III, 8.
- Pappenheimer, A. M., and Goettsch, M., effect of nerve section on development of nutritional muscular dystrophy in young rats, III, 568.
- See also Porter, E. F.
- Pappenheimer, A. M., jun., anti-ovalbumin antibody in the horse, III, 456.
- and Hottle, G. A., effect of certain purines and carbon dioxide on growth of strain of group A hæmolytic streptococcus, III, 936.
- Lundgren, H. P., and Williams, John Warren, mol. wt. of diphtheria toxin, antitoxin, and their reaction products, III, 452.
- Pappenheimer, J. R. See Eggleston, M. G.
- Papperitz, W. See Langendorff, H.
- Pappworth, M. H. See Rubin, E. L.
- Paquin, F. See Selle, W. A.
- Parade, G. W. See Staemmler, M.
- Pardo-Castello, V., yaws [serological tests], III, 171.
- Pardue, E. See Ruark, A. E.

- Pardue, L. A. See Gaertner, E. R.
- Parekh, N. B. See Varma, P. S.
- Parent, J. D., normal m.p. and b.p. of iodine, I, 352. Simplification of calculations based on the mass law, I, 358.
- Parfenova, E. A. See Lazarev, B. G.
- Parfentev, L. N., and Abramov, M. M., action of bromine on sodium ethoxide, II, 34.
- Parini, F., morphology and histology of testis and pituitary gland during prostatic hypertrophy, III, 308.
- Paris, R., and Rigal, M., *Erythrophleum*: bark and berries of *E. guineense*, G. Don., III, 777.
- See also Clerc, A.
- Parish, H. J., and Oakley, C. L., anaphylaxis after tetanus toxoid, III, 542.
- See also Bigger, J. W.
- Park, G. E., and Park, R. S., further evidence of change in position of eyeball during fixation, III, 722.
- Park, O., and Woods, L. P., modified Hemmingsen-Krarup mammalian activity recorder, III, 618.
- Park, R. D., and Mouzon, J. C., evidence against the existence of an excited state of ^3He , I, 338.
- Park, R. S. See Park, G. E.
- Park, T., Miller, E. V., and Lutherman, C. Z., population physiology. IX. Effect of imago population density on duration of larval and pupal stages of *Tribolium confusum*, Duval, III, 648.
- Parke, R. M. See Blanchard, J. R.
- Parker, B. W. See Proctor, B. E.
- Parker, E. See Fricke, H., and Kotz, J.
- Parker, F. See Weiss, S.
- Parker, F., jun., and Tenney, B., jun., hormone content of human tissues in pregnancy, III, 662.
- See also Mallory, F. E.
- Parker, F. S., and Andrews, D. A., Mizpah coal field, Custer County, Montana, I, 334.
- Parker, G. C., and Perkins, O. C., arspenamine poisoning, III, 681.
- Parker, G. H., general anaesthesia by chilling, III, 63. Relation of eyes to integumentary colour changes in catfish *Ameiurus*, III, 114. Active and resting states of catfish melanophores, III, 588. Types of animal reflexes, III, 715.
- Parker, J. H., nerve reflexes, III, 636.
- Parker, J. M. See White, H. J.
- Parker, P. T. See Gilman, H.
- Parker, R. C. See Landsteiner, K.
- Parker, R. F., infectious unit of myxoma, III, 773.
- Parker, R. L. See Comfort, M. W.
- Parker, W. L., and Phillips, L. W., magnesium-like spectra of chlorine, potassium, calcium, and scandium, I, 137. Spectra of highly ionised argon, I, 335.
- Parkes, A. S., and Young, F. G., influence of subcutaneous implantation of tablets of solid insulin on blood-sugar level of rabbit, III, 305.
- See also Emmens, C. W., and Warwick, M. H.
- Parkes, G. D., and Walton, G. N., octahydro-dinaphthylene and -naphthidine, II, 126.
- Parkigian, V. See Hunter, F. R.
- Parkinson, G. G., jun., and Nelson, J. M., tyrosinase. II., III, 826.
- Parkinson, J., Bedford, D. E., and Thomson, W. A. R., cardiac aneurysm, III, 886.
- Parks, E. A., therapy of rickets, III, 916.
- Parks, G. S., and Moore, G. E., heat of combustion of isopropyl alcohol, I, 74.
- and Shomate, C. H., heat capacity data for isopropyl alcohol vapour, I, 323.
- See also Moore, G. E., and Richardson, J. W.
- Parks, H. C. See Vosburgh, W. C.
- Parks, L. M. See Hecht, B. P.
- Parlee, N. A. D., Arnell, J. C., and Coffin, C. C., homogeneous first-order gas reactions. XI. Decomposition of benzylidene diacetate, *o*-chlorobenzylidene diacetate, and benzylidene dibutylate, I, 414.
- See also Steacie, E. W. R.
- Parmelee, A. H. See Miller, E. M.
- Parmenter, C. L., chromosome numbers in parthenogenetic frogs, III, 875.
- Parnall, C. G. See Melnick, D.
- Parnas, J. K., application of radioactive isotopes to study of biochemical exchanges and transformations, III, 59.
- Parnum, D. H. See Martin, L. C.
- Parodi, A. S., blood changes in hypophysectomised dogs, III, 730.
- Parpart, A. K. See Ballentine, R., and Taylor, A. R.
- Parr, E. A., pathology of rickets, with particular reference to changes at cartilage-shaft junctions of the growing bones, III, 820.
- Parratt, L. G. See Randall, C. A., and Richtmyer, F. K.
- Parravano, N., and Pesce, B., isotopic composition of rain-water, I, 236. Isotopic composition of natural waters, I, 236.
- Parrington, F. R., and Westoll, T. S., evolution of mammalian palate, III, 833.
- Parrique, M. G., evolution of pneumonioses, III, 929.
- Parrish, D. B. See Peterson, W. J.
- Parrish, P. P., Console, W. A., and Battaglia, J., sulphanimide in gonococcal arthritis of the newborn, III, 331.
- Parrish, W., unit cell and space-group of monazite, $(\text{La,Ce,Y})\text{PO}_4$, I, 136. Reflectivity and colour of minerals, I, 178.
- See also Kaiser, E. P.
- Parrot, J. L., anaphylactic shock; diastatic conception of anaphylaxis, III, 444.
- See also Ungar, G.
- Parrott, E. M. See Hogan, A. C.
- Parsons, C. G., stomatitis in childhood, III, 500.
- and Wright, F. H., circulatory function in anemias of children. I. Effect of anemia on exercise tolerance and vital capacity. II. Measurements of blood-oxygen content, circulation time, and venous pressure. IV. Roentgenographic measurement of cardiac size, III, 15, 631.
- Parsons, E. I., and Hyde, R. R., spermatotoxic sera in prevention of pregnancy, III, 661.
- Parsons, H. T. See Johnson, L. M.
- Parsons, J. C. See Kaump, D. H.
- Parsons, J. H., night-shining eyes, III, 893.
- Parsons, L. D., bile production in tumour-bearing mice and use of bile in filtration, III, 46.
- Parthasarathy, S., light-scattering, I, 155.
- Partington, P. F. See Chaffey, E.
- Partridge, J. H. See Rooksby, H. P.
- Partridge, M. W. See Gulland, J. M.
- Partridge, S. M., and Morgan, W. T. J., immunisation experiments with artificial complexes formed from substances isolated from the antigen of *Bact. shiga*, III, 935.
- See also Morgan, W. T. J.
- Pascal, J. I., calculating lens power, III, 397.
- Pascall, D. C. S. See Ghosh, R.
- Paschkis, K. E., and Schwoner, A., output of protein metabolism hormone of anterior pituitary, III, 401.
- Shay, H., Gershon-Cohen, J., and Fels, S. S., masculinisation of female rats treated with testosterone propionate, III, 734.
- See also Gershon-Cohen, J., and Shay, H.
- Pasichnik, M. V., temperature factor in diffraction of electrons, I, 51.
- Pask, E. A. See Sames, N. R.
- Paskind, H. A., and Brown, M., frequency of seizures of epilepsy, III, 23. Age of onset of epilepsy, III, 23. Constitutional differences between deteriorated and non-deteriorated patients with epilepsy. II., III, 24.
- Pasnicha, C. L., Lal, S., and Banerjee, K., effects of oral administration of argemone oil, III, 823.
- Pasqualini, R. Q., subcutaneous absorption in toads after destroying lymphatic hearts, III, 562.
- Pasqualino, A., fine nerves of ureter, III, 843.
- Passantino, G., development and ossification of fibula in sheep and goat, III, 551. Elastic and smooth muscle fibres in mammalian lymph glands, III, 712.
- Passerini, M., and Losco, G., action of methyl iodide on Schiff's bases of phenylmethylpyrazole-aldehyde and benzaldehyde, II, 56.
- Passino, H. J. See Simons, J. H.
- Passvik-Chlopov, M. A. See Chlopov, V. G.
- Pasteels, J., new plan of positions of future organs in young gastrula of *Discoglossus*, III, 178. Position of future organs in egg of axolotl prior to gastrulation, III, 178. Gastrulation in the chordates, III, 278. Initial factors in morphogenesis of *Anura*. II. Successive blastopore lips in same egg. III. Effects of rotation of 135° on unsegmented egg with grey crescent. IV. Axial centrifugalisation of the fertilised but unsegmented egg, III, 278, 553. Action of centrifuging on fertilised unsegmented eggs of *Rana fusca* and *Discoglossus pictus*, III, 699.
- Pasternack, J. G., reliable one hour method for preparation of paraffin sections of tissues, III, 467.
- Pasternack, J. S., and Bengtson, I. A., experimental pathological changes produced by toxin of *Cl. histolyticum* in animals, III, 769.
- Pasternak, M., changes in blood-pH in cancer, III, 97.
- Pastore, J. B. See Lord, J. W., jun., and Moore, R. A.
- Pastore, P. N., and Williams, H. L., congenital occlusion of nasal choana, III, 834.
- Patankar, W. P. See Kelkar, K. V.
- Patekm, A. J., jun., Post, J., and Victor, J. C., vascular "spider" associated with cirrhosis of liver, III, 885.
- Patel, M. S. See Gokhale, G. D.
- Paternò, P. See Valeri, C. M.

- Paternosto, P. G.**, replacement of iron by aluminium in preparation of potassium iodide by double decomposition, I, 227.
- and De Santibañes, J.**, action of carbon monoxide, carbon dioxide, and mixtures of both on aluminium powder, I, 228. Aluminium carbide; preparation from smoke-black and aluminium powder, I, 228.
- Paterson, J. C.**, capillary rupture with intimal hæmorrhage in causation of cerebral vascular lesions, III, 475.
- and Farr, J. T.**, pulmonary collapse as cause of neonatal death, III, 194.
- Paterson, J. L. H.**, stored blood for transfusion, III, 92.
- Paterson, N. F.**, head of *Xenopus laevis*, III, 551.
- Patnode, W.**, and **Scheiber, W. J.**, density, thermal expansion, vapour pressure, and refractive index of styrene, and the density and thermal expansion of polystyrene, I, 105.
- Paton, H. W.** See **Hurd, C. B.**
- Patras, M. C.** See **Ferguson, R. L.**, and **Tweedy, W. R.**
- Patrick, D. R.** See **Bracken, M. M.**
- Patrick, S. H. M.** See **Wilkins, W. H.**
- Patrushev, V. I.**, physiological differences in draft-horses as correlated with their performance, III, 67. Physiological variation in English racehorses, III, 95. Speed and blood value of English racehorses, III, 95. Physiological variation in horse with age, breed, and performance, III, 95.
- Pattee, C. J.** See **Hamblen, E. C.**
- Patterson, A. L.**, diffraction of X-rays by small crystalline particles, I, 61. Scherrer formula for X-ray particle size determination, I, 61.
- Patterson, C. O.** See **Metz, M. H.**
- Patterson, H. S.** See **Wijk, A. M. van.**
- Patterson, T. L.** See **Friedman, M. H. F.**
- Patterson, T. S.**, and **Buchanan, C.**, influence of solvents and other factors on the rotation of optically active compounds. XXXVIII. Asymmetric solvent action (continued), I, 197.
- See also **Lapsley, R. W.**
- Patterson, W. B.** See **Hunt, H. F.**
- Patterson, W. P. E.**, treatment of nasal sinus infection by ultra-short-wave diathermy, III, 606.
- Patton, A. R.**, glycine toxicity [to hens], III, 48.
- See also **Wilgus, H. S., jun.**
- Patwardhan, V. N.** See **Niyogi, S. P.**
- Paul, F. W.**, spectrum of Ne v, I, 49.
- and Rense, W. A.**, spectra of Y v and Zr vi, I, 50.
- Paul, J. R.** See **Kennard, M. A.**
- Paul, J. T.**, and **Limarzi, L. R.**, toxic and therapeutic response of blood and bone marrow to sulphanilamide, III, 520.
- Paul, S.** See **Hilditch, T. P.**
- Paul, W. D.** See **Hyndman, O. R.**
- Pauli, W.**, and **Belinfante, F. J.**, statistical behaviour of known and unknown elementary particles, I, 191.
- Paulin, G.** See **Gley, P.**
- Pauling, L.**, colour of dyes, I, 56.
- and Delbrück, M.**, nature of intermolecular forces operative in biological processes, III, 866.
- See also **Coryell, C. D.**, and **Russell, C. D.**
- Paulraj, M.** See **Cochrane, R. G.**
- Paulsen, I. A.** See **Nilssen, B.**, and **Zvjagintzev, O. E.**
- Paulsen, N.** See **Nilssen, B.**
- Paulson, D. L.**, experimental exophthalmos and muscle degeneration induced by thyrotrophic hormone, III, 808.
- Paunescu-Podeanu, A.**, and **Carangiu, O.**, asthma cured by insulin shock treatment, III, 105. Treatment of malaria by intravenous adrenaline, III, 152.
- See also **Ciorapcin, S.**
- Pavlenko, A. V.** See **Prokopetz, E. I.**
- Payne, C. A.**, inexpensive electric bone saw, III, 618.
- Payne, C. J.** See **Anderson, B. W.**
- Payne, F.**, "signet ring" or "castration" cells in chick, III, 785.
- Payne, S.**, and **Shelton, E. K.**, stilbæstrol, III, 735.
- Payne, W. W.**, plasma-phosphatase in jaundice in children, III, 288.
- Payne-Gaposchkin, C.**, and **Whipple, F. L.**, synthetic spectra for supernovæ, I, 335.
- Payr, E.**, action of acetylcholine in chronic arthritis, III, 922.
- Pazar, D.** See **Kup, J. von.**
- Pehakadze, G. M.**, chromosome complement in buffalo, III, 465.
- Peacock, G.** See **Emmett, A. D.**
- Peacock, M. A.**, crystallography of copiapite, I, 240. Maucherite (nickel-speiss, placodine, temiskamite), I, 333. Goldschmidtine identical with stephanite, I, 380.
- Peacock, P. R.**, and **Shukoff, R. I.**, use of desiccated chick embryo in tissue culture technique, III, 785.
- See also **Beck, S.**
- Pearce, J. A.** See **Munro, L. A.**
- Pearce, J. M.**, cardiac lesions in rabbits produced by a filterable virus (virus III), III, 191.
- Pearce, L.**, tryptarsamide in the control of African sleeping sickness, III, 64.
- Pearce, S. J.** See **Schrenk, H. H.**
- Pearce, T. V.**, childbirth after presacral neurectomy, III, 662.
- Pearl, F. L.**, and **Kandel, A.**, peripheral vascular status of one hundred unselected patients with diabetes, III, 631.
- Pearl, R.**, index of body build, III, 700.
- and Moffett, W. E.**, bodily constitution and human longevity, III, 373.
- Pearlman, H.** See **Amdur, I.**
- Pearlman, L. N.** See **Shirreff, W. T.**
- Pearlman, W. H.**, and **Wintersteiner, O.**, æstrogens with oxygen in ring B. II. Δ^6 -iso-Equilin from 7-hydroxyæstrone, II, 134.
- Pearsall, W. H.**, and **Bengry, R. P.**, growth of *Chlorella* in darkness and in glucose solution, III, 939.
- Pearse, H. L.**, water culture studies with apple. II. Seasonal absorption of nitrogen and potassium by Cox's Orange Pippin on Mallory rootstocks Nos. IX and XII, III, 458.
- See also **Hwang, Y.**
- Pearse, R. W. B.** See **Gaydon, A. G.**, and **Ishaq, M.**
- Pearson, A. R.**, radiation and "stuffiness," III, 865.
- Pearson, B.** See **D'Aunoy, R.**
- Pearson, E. F.**, clinical desensitisation to wheat by acetylcholine derivative, III, 829.
- Pearson, P. B.** See **Winegar, A. H.**
- Pearson, T. G.** See **Lunt, R. W.**
- Pearsons, J.** See **Little, C. C.**, and **Sharpless, G. R.**
- Pease, D. C.**, and **Elderfield, R. C.**, loco weeds. I. Isolation of α - and β -earleine from *Astragalus earlei*, II, 185.
- Pease, D. C.**, and **Marsland, D. A.**, cleavage of *Ascaris* eggs under exceptionally high pressure, III, 306.
- Reider, M. J.**, and **Elderfield, R. C.**, loco weeds. II. Isolation of *d*-pinitol from *Astragalus earlei* and *Oxytropis lambertii*, III, 462.
- See also **Adams, R.**, and **Kitching, J. A.**
- Pease, R. N.** See **Burnham, H. D.**, and **Day, R. A., jun.**
- Peat, S.**, and **Whetstone, J.**, acetolysis of methylated starch, II, 156.
- See also **Goodman, G. L.**, **Haworth, W. N.**, and **Lyne, R. R.**
- Pecciarini, E.**, pharmacology of venom of *Bothrops jararacussu*, III, 66.
- Pecher, C.**, fluctuation of excitability of nerve fibre, III, 297.
- Peck, M. E.** See **Brooks, C. M.**
- Peck, R. L.**, and **Hauser, C. R.**, chemical studies of pathogenic fungi. III. Lipins of *Blastomyces dermatitidis* and *Monilia albicans*, III, 767.
- See also **Anderson, R. J.**
- Peck, S. M.**, **Rosenfeld, H.**, and **Glick, A. W.**, fungistatic power of serum, III, 881.
- Rosenfeld, H.**, **Leifer, W.**, and **Bierman, W.**, rôle of sweat as fungicide; use of constituents of sweat in therapy of fungous infections, III, 152.
- Peck, W. S.**, **McGreer, J. T.**, **Kretschmar, N. R.**, and **Brown, W. E.**, artificial menopause by irradiation, III, 808.
- Pecker, A.** See **Greenblatt, I. J.**
- Peckham, R. H.** See **Spiegel-Adolf, M.**
- Pecora, L. F.** See **Coombs, F. S.**
- Pedely, W. H.** See **Hilditch, T. P.**
- Pedersen, H.** See **Jordan, J. H.**
- Pedersen, K. J.**, dissociation constant of the anilinium ion, I, 73.
- Pedersen-Bjergaard, K.** See **Thomsen, O.**
- Pedley, F. G.**, industrial poisons problem in Canadian industry, III, 257.
- Pédron, A.** See **Tiollais, R.**
- Peel, J. H.**, effects of stilbæstrol on labour, III, 655. Persistent menstruation until 71, associated with ovarian tumour, III, 661.
- Peer, L. A.**, fate of buried skin grafts in man, III, 697.
- Peet, E. W.** See **MacNaughton, I. P. J.**
- Péhu, M.**, and **Leriche, F.**, anæmia of Cooley's type, III, 627.
- Peierls, R.**, critical conditions in neutron multiplication, I, 52. Size of a dislocation [in a crystal], I, 247. Theory of nuclear forces, I, 280.
- Peirce, G.** See **Arnold, R. T.**
- Peiser, E.** See **Neuberg, C.**
- Peiser, H. S.** See **Evans, R. C.**
- Peizer, L. R.**, employing horse plasma and hæmoglobin as enrichments in primary gonococcus isolations, III, 263.
- Pekar, S. I.**, rectifying effect of semiconductor with blocking layers, I, 58.
- Pelczar, M. J., jun.**, and **Porter, J. R.**, pantothenic acid and nicotinic acid as essential growth substances for Morgan's bacillus, III, 541.
- See also **Porter, J. R.**
- Pelkis, P. S.**, and **Dunaevskaja, C. S.**, reaction of unsaturated halogen compounds of the types CR_2CX_2 and NR_2CX_2 with azides. I. Reaction of phenylcarbamylamine chloride with sodium azide, II, 260.
- Pellegrini, G.**, production of protein by bacteria. III. Economic coefficient of the spore-forming soil bacterium, *Bacillus silvaticus*, III, 451.

- Peller, S., Stephenson, C. S., and Souder, C. G., cancer and climatic conditions during childhood and adolescence, III, 816.
- Pelmore, D. R., and Simons, E. L., behaviour of polar molecules in solid paraffin wax, I, 284.
- Pelser, H. See Weidinger, A.
- Pelzel, E., density measurements [of aluminium-magnesium alloys] at high temperatures, I, 206.
- Pemberton, J., malnutrition and hyperkeratosis [of skin follicles], III, 818.
- Pemberton, R. See Eandurand, R.
- Pembroke, R. H., jun. See Lisansky, E. T.
- Pence, L. H. See Binz, A. H.
- Pencharz, R. I., factors influencing ovarian response of normal and hypophysectomised rat to pregnant mare serum, III, 650. Effect of oestrogens and androgens alone and in combination with chorionic gonadotrophin on ovary of hypophysectomised rat, III, 810.
- Cole, H. H., and Goss, H., response of hypophysectomised rats to highly purified extracts of pregnant mare serum, III, 731.
- See also Cole, H. H.
- Penciolelli, E. See Libessart.
- Pendergrass, E. P. See Wagoner, G.
- Penet, G. See Dumazert, C.
- Penfield, W., epilepsy and cerebral lesions of birth and infancy, III, 201.
- and Boldrey, E., cortical spread of epileptic discharge and conditioning effect of habitual seizures, III, 486.
- and Humphreys, S., epileptogenic lesions of brain: histologic study, III, 720.
- and Keith, H. M., focal epileptogenic lesions of birth and infancy; report of 8 cases, III, 801.
- See also Chao, Y.
- Penfold, A. R., and Simonsen, J. L., calythrone, II, 203.
- Peng, C. C. See Tang, T. H.
- Peniston, Q. P., McCarthy, J. L., and Hibbert, H., lignin and related compounds. L. Fractionation of acetylated cell wall constituents of red oak wood, II, 378.
- See also Cantor, S. M.
- Pennell, R. B. See Huddleson, I. F.
- Penner, A., and Bernheim, A. I., experimental production of digestive tract ulcerations, III, 812. Acute ischaemic necrosis of kidney, III, 910.
- Hollander, F., and Post, A., use of phenol-red dilution indicator in gastric analysis, III, 740.
- Hollander, F., and Saltzman, M., gastric absorption of phenol-red in man, III, 35.
- See also Hollander, F.
- Pennetta, G., effect of diethyl ether on cholesterol metabolism, III, 433.
- Penney, W. G., bonding powers of groups of *d* electrons, I, 284.
- See also Kynch, G. J.
- Penning, F. M., and Moubis, J. H. A., cathode sputtering in a magnetic field, I, 102.
- Pennington, A. See Walker, R.
- Pennington, D., Snell, E. E., and Williams, R. J., assay of pantothenic acid, III, 915.
- See also Snell, E. E.
- Pennington, L. A., thermo-coagulation in destruction of tissue in cerebral cortex of small animals, III, 843.
- Penquite, R. See Heller, V. G.
- Penrose, L. S., maternal age, order of birth, and developmental abnormalities, III, 372.
- and Pugh, C. E. M., creatinine in mentally defective patients, III, 300.
- Pentschew, A., overdoses with adrenal cortex hormone, III, 727.
- Pepe, R. O., preparation of depsides by means of azides. III. Action of trimethylgallazide on diphenols, II, 277.
- Pepin, C., air-free carbon dioxide, I, 444.
- Peppard, D. F. See Bailar, J. C., jun.
- Pepper, D. S., Flippin, H. F., Schwartz, Leon, and Lockwood, J. S., results of sulphapyridine therapy in 400 cases of typed pneumococcal pneumonia, III, 244.
- and Horak, H. M., crystalline concretions in renal tubules following sulphathiazole therapy: widely patent foramen ovale in a patient aged 77, III, 599.
- See also Johnson, S. H.
- Percival, E. G. V., and Buchanan, J., carrageen mucilage, II, 338.
- See also Forbes, I. A.
- Percival, F. G., Sulapit iron mine, I, 422.
- and Spencer, E., conglomerates and lavas in the Singhbhum-Orissa iron ore series, I, 333.
- Percival, R. C., effects of pituitary extract (posterior lobe) in third stage of labour, III, 302.
- Perdigon, E. See Meyerhof, O.
- Perdreau, H. See Tiollais, R.
- Peregudova, E. S., effect of nicotine and acetylcholine on fatigue curve of skeletal muscle of frog, III, 19.
- Pereira, J., vanadium therapy in human protozoa diseases, III, 869.
- Pereira, J. C., phonocardiographic studies of the foetus and mother during the latter months of pregnancy, III, 191.
- Pérel, L. See Binet, L.
- Péres, J. N. See Pacheco, G.
- Peretti, G., and Manca, B., cataphoresis of serum dialysate from parathyroidectomised dogs, III, 123.
- Peretti, L., petrographic studies of Val Masino (Valtellina). I. Tonalitic diorite and vein-bearing granite of Bagni-Masino, I, 86. Beryl from C. Mondei near Montescheno (Val d'Ossola), I, 237.
- Perey, (Mlle.) M., element S7; Ac-K, derived from actinium, I, 3.
- and Lecoin, M., radiation from the radio-element Ac-K, I, 3.
- Pérez, H. See Calderón, E. A.
- Perez, J. J., and Sandor, G., acetylation of cysteine by keten, II, 325.
- Perez, M., contents of vesicula seminalis, III, 33. *In-vitro* effect of sulphamide derivatives on influenza virus, III, 438.
- Perfilov, N. A., disintegration of uranium by neutrons, I, 5.
- See also Dmitriev, N. N.
- Périer, A., and Grosjean, M., histological structure of dentine, III, 626.
- Perkin, H. J., and Hurxthal, L. M., fractionation of iodine of blood in thyroid disease, III, 208.
- and Lahey, F. H., level of iodine in blood, III, 630.
- See also Chamberlin, D. T.
- Perkins, A. E. See Monroe, C. F.
- Perkins, M. E. See Clark, W. M.
- Perkins, O. C. See Parker, G. C.
- Perla, D., Freiman, D. G., Sandberg, M., and Greenberg, S. S., prevention of histamine and surgical shock by adrenal cortical hormone and saline, III, 643.
- Perla, D., and Marmorston, J., adrenal cortical hormone and salt in treatment of pneumonia and other severe infections, III, 897.
- and Sandberg, M., metabolic interdependence of vitamin-B₁ and manganese; reciprocal neutralisation of their toxic effects, III, 50.
- Sandberg, M., and Holly, O. M., interdependence of vitamin-B₁ and manganese. II. Manganese, copper, and iron distribution in B₁-deficient rats. III. Manganese, copper, and iron metabolism in normal rats, III, 322.
- See also Sandberg, M.
- Perles, S. See Emile-Weil, P.
- Perley, G. A., analysis with the dropping mercury electrode, I, 230.
- Perlitz, H., and Aavakivi, R., atomic parameters of γ -silver-cadmium, I, 12.
- and Aruja, E., crystal structure of lithium, I, 348.
- Perlman, E., spectrophotometer for comparing the spectra of solutions of different depth, I, 82.
- Perlman, H. B., hyperacusis, III, 26.
- Process of healing in injuries to capsule of labyrinth, III, 27.
- and Case, T. J., latent period of crossed stapedius reflex in man, III, 118.
- See also Kobrak, H. G.
- Perlman, H. H., chronic Gaucher's disease, III, 518.
- Perlman, I., Stillman, N., and Chaikoff, I. L., radioactive phosphorus as an indicator of phospholipin metabolism. XI. Effect of methionine, cystine, and cysteine on phospholipin exchange in the liver. XII. Effects of amino-acids on phospholipin activity of liver, III, 597, 918.
- Perloff, W. H. See Kurzrok, R., and Redisch, W.
- Perlow, G. J., energy released in the disintegration of ⁶Li by protons, I, 383.
- See also Allison, S. K.
- Perlow, S., prostigmine in peripheral circulatory disturbances, III, 842.
- Perlzeig, W. A. See Saret, H. P.
- Perman, J. M. See Smith, D. C.
- Permar, H. H. See Bracken, M. M.
- Perminova, A. N. See Naumov, S. N.
- Pernot, (Mlle.) M., system mercuric iodide-rubidium iodide-water, I, 257.
- Péronnet, M., and Guénin, J., action of a copper-iodine reagent on alkaloids; precipitation and colour reactions, II, 242.
- and Rémy, R. H., two precipitation reactions of organic arsenic compounds, II, 112.
- Perrault, A. See Cabot, S.
- Perret, A., thermal formation of cyanides of elements of the iron group and catalysis of the cyanide-cyanamide equilibrium, I, 225.
- and Riethmann, J., electrolysis of fused potassium cyanate, I, 33.
- Perreu, J., variation of the differential heat of dissolution of normal organic substances in their dilute aqueous solutions at constant temperature and as a function of concentration, I, 218.
- Perri, G. G., reticular tissue of blood vessels in thymus of *Vipera aspis*, III, 374.
- Perrimon-Trouchet, R. See Machebœuf, M. A.
- Perrin, F. See Halban, H., jun.
- Perrine, T., and Kump, W., small centrifuge tube filter, I, 134.

- Perroncito, G., action of substitution products of carboxylic hydroxyl on methylenepyrzoles, II, 194.
- Perrot, L. See Berard, L.
- Perrotet, E. See Naves, Y. R.
- Perrotet, F. See Briner, E.
- Perry, C. A., and Petran, E., routine laboratory examinations for *C. diphtheriae*, III, 75.
- Perry, C. B., rheumatic heart disease in identical twins, III, 841.
- Perry, L. H. See McBain, M. E. L.
- Perry, M. C. See Hansmann, G. H.
- Perry, S., and Hibbert, H., quantitative analysis of mixtures of polyethylene glycols by fractional distillation, II, 386.
- Perry, S. H., Helt Township (Indiana) meteorite, I, 44.
- Perry, T., cyclotron magnet-current stabiliser, I, 395.
- Person, E. C., and Glenn, F., pancreaticogastrostomy, III, 851.
- Person, H. See Plötte, E.
- Pertus, R. See Hubert, C.
- Pesce, B., temperature-dependence of apparent molecular volume of dissolved electrolytes. II, I, 203. Apparent equivalent refraction of calcium nitrate in methanol solution, I, 204.
- See also Parravano, N.
- Pesez, M., identification of cocaine; new colour reaction, II, 32.
- Pestellini, G., effect of temperature of water on apnoea in immersed ducks, III, 18. Effect of cerebral lesions on ocular nystagmus in guinea-pigs habituated to rotation, III, 893.
- Pestrecov, K. See Karpovich, P. V.
- Peták, K. See Tomiček, O.
- Peter, H., inhibition and promotion of bacterial enzymes in infected animals. IV. Pathogenic action of the gas-gangrene bacillus, III, 354.
- Peter, K., gastrulation and development of notochord in reptiles, III, 2.
- Péteri, E., new synthesis of 4:4'-dimethoxy- α -diethylstilbene, II, 306.
- Petering, H. G., Duggar, B. M., and Daniels, F., quantum efficiency of photosynthesis in *Chlorella*. II, III, 271.
- Morgal, P. W., and Miller, E. J., isolation of carotene from green plant tissue, III, 944.
- Wolman, W., and Hibbard, R. P., determination of chlorophyll and carotene in plant tissue, III, 549.
- Peterlin, A., and Stuart, H. A., influence of rotation hindrance and anisotropy of the inner field on polarisation of liquids, I, 11.
- Peters, B. A., dried diphtheria antitoxin, III, 541.
- Peters, C. See Brill, R.
- Peters, C. A., ozone in the Sept. 21st, 1938, hurricane, I, 84.
- Williams, Sidney, and Mitchell, P. C., simplification of Power's method for the determination of carbon dioxide in natural waters and comparison with the titration method, I, 268.
- Peters, C. M., and Faulkner J. M., circulatory effects of volatile amphetamine (benzedrine inhaler), III, 248.
- Peters, D. D. See Sobel, A. E.
- Peters, E., and Saslov, G., performance of the Hepp micro-osmometer, III, 160.
- Peters, G., influence of respiration on finger-plethysmogram, III, 477.
- Peters, G. A., and Horton, B. T., effect of intravenous administration of histamine on gastric acids in man, III, 906.
- Peters, H. See Kemp, A. R.
- Peters, H. A. See Winters, M.
- Peters, H. C., general fluid-circuit theory of active chloride absorption, III, 907.
- Peters, H. R. See Wiener, A. S.
- Peters, J. P. See Dorfman, R. I., Gildea, E. F., Man, E. B., Newburger, R. A., and Solomon, R. Z.
- Peters, K., photochemical reactions under high pressure, I, 79.
- Peters, R. A., clinical aspects of vitamin-B complex, III, 143. Biochemistry of brain tissue, III, 572. Cocarboxylase, III, 931.
- and Wakelin, R. W., interfacial tension, μH , and chemical constitution, I, 69.
- See also Banga, I., and Ochoa, S.
- Petersdorff, H. J. von. See Steinkopf, W.
- Petersen, G. F., severe peripheral arteriosclerosis in extremities, III, 886.
- Petersen, J. N., and Keith, H. M., newer drugs in treatment of epilepsy, III, 890.
- Petersen, O., optical method for measuring ultrasonic absorption in gases and liquids, I, 235.
- Petersen, W. E., and Boyd, W. L., factors affecting reliability of arterio-venous differences in study of blood precursors of milk, III, 659.
- See also Shaw, J. C.
- Peterson, E. H. See Hastings, E. G.
- Peterson, F. C., Barry, A. J., Unkauf, H., and Wise, L. E., chemistry of wood. VII. Esters and ethers of the water-soluble polysaccharides of larch wood, II, 365.
- Peterson, M., magnetic susceptibility variations of lead oxide, I, 387.
- Peterson, R. L. See Coley, B. L.
- Peterson, W. H., and Elvehjem, C. A., conditions affecting the content of chick antidermatitis vitamin in yeast, III, 324.
- See also Berger, J., and Woolley, D. W.
- Peterson, W. J., and Parrish, D. B., fluctuations of phosphatase and inorganic phosphorus in blood of laying hens during egg formation, III, 97. Phosphatase and inorganic phosphorus in plasma and whole blood of the fowl, III, 97.
- Petiau, G., general theory of elementary corpuscles and the theory of the photon, I, 92.
- Petitpas, (Mlle.) T., gelatinisation of cellulose nitrates, I, 255.
- Petiunin, P. A., preparation of esters in presence of magnesium chloride, II, 243.
- Petke, F. E. See Kienle, R. H.
- Peto, F. H., and Boyes, J. W., comparison of diploid and triploid sugar beets, III, 871.
- Petran, E. See Perry, C. A.
- Petranyi, J. See Molnar, S.
- Petre, G. See Tudoranu, G.
- Petrie, A. H. K. See Ward, E. D.
- Petrihak, K. A. See Dmitriev, N. N., Flerov, and Polesitski, V. E.
- Petrocelli, J. V., electrolysis of sodium cuprocyanide solution, I, 75.
- Petrov, A. A., conjugated systems. VIII. Reaction of β -chloro- $\Delta^{\alpha\gamma}$ -butadiene with hypobromous acid, and the synthesis of chlorovinylethylene oxide, II, 148.
- See also Lichoscherstov, M. V.
- Petrov, A. D. [with Sumin, I. G., Meero-vitsch, Z. A., Kudrina, K. N., and Tichonova, G. N.], synthesis of sec. alcohols, and their dehydration over alumina, II, 149.
- [with Vlasov, V. V., Stankevitch, E. I., Tichonova, E. E., and Komlev, S. M.], dehydration over alumina of tert. alcohols of the $C_nH_{2n+1}OH$ series, II, 149.
- and Sanin, P. S., synthesis and dehydration of di-sec. and di-tert. glycols of the $C_nH_{2n+2}O_2$ series, II, 149.
- Petrov, V. G., condensation of N-halogeno-amides with aliphatic sulphides. I, II, 157.
- Petrov, V. P. See Beliankin, D. S.
- Petrovicki, H., action of methylglyoxalase, III, 532.
- Petrovits, L., technique of rubber injection, III, 372.
- and Szabó, Z., arterial supply of peripheral nerves, III, 371. Structure of peripheral nerves in straight and curved parts of their course, III, 466.
- Petrovskaja, B., action of drugs on isolated perfused lungs of pig, III, 105.
- Petrovskaja, L. V. See Liepatov, S. M.
- Petrow, V. A., preparation of Δ^4 -cholestadien-3(β)-ol, II, 84.
- and Starling, W. W., steroids and related compounds. V. Steroid diosphenols, II, 95.
- Pett, L. B., vitamin-A deficiency: prevalence and importance as shown by new visual test, III, 143. Mobilisation of vitamin-A by alcohol, III, 857.
- and LePage, G. A., vitamin-A deficiency. III. Blood analysis correlated with a visual test, III, 320.
- Pettengill, R. B. See Beckman, W. W.
- Petterson, H., blue rock-salt, I, 334.
- and Kullenberg, B., vacuum core-sampler for deep-sea sediments, I, 236.
- Petterson, W., endocrine structure and Abderhalden's interferometric reaction, III, 805.
- Pettit, E., spectral energy curve of the sun in the ultra-violet, I, 282.
- Petzold, H., action of injections of suspensions of spleen and bone marrow of normal and leukemic individuals on differential count of mouse, III, 377.
- Petzold, R. See Seheunert, A.
- Pevsniak, R. M. See Bruevitch, S. V.
- Pewterbaugh, D. C., *Staphylococcus aureus* meningitis [treated with sulphanilamide], III, 151.
- Peynaud, E., formation and disappearance of volatile acids during anaerobic alcoholic fermentation, III, 536.
- Peyron, A., primordial germ cells and comparative morphology of embryomata; normal and teratomatous embryology, III, 4.
- and Suzanne, M., carcinogenic action of autolysed human leproma on the interstitial tissue of rat testicle, III, 141.
- Peyton, W. T., topographic study of orbit and bulbus oculi during part of growth period, III, 572.
- See also Green, R. G.
- Pezzi, A. R. See Gargiulo, A.
- Pezzini, Z. M. See Guercio, F.
- Pfaffmann, C., different impulses from teeth and vibratory stimuli, III, 110. Afferent impulses from teeth due to pressure and noxious stimulation, III, 110.

- Pfankuch, E., and Kausche, G. A., isolation and supermicroscopic representation of bacteriophage, III, 542.
- Pfanner, E. See Fierz-David, H. E.
- Pfeiffer, C., Foster, M. A., and Slight, D., effect of analeptic drugs on hibernation in the thirteen-lined ground squirrel, III, 154.
- See also Stormont, R. T.
- Pfeiffer, C. A., experimentally induced endocrine imbalance in female mice, III, 651.
- Emmel, V. M., and Gardner, W. U., renal hypertrophy in mice receiving oestrogens and androgens, III, 903.
- See also Hooker, C. W., and Kirschbaum, A.
- Pfeiffer, N. E., life of gladiolus pollen prolonged by storage, III, 364.
- Pfeiffer, P., structural principles of inner complex salts, I, 347.
- Breitbart, J., and Scholl, W., alkaloid-like compounds from brasilin and haematoxilin, II, 190.
- Pfeil, E. See Meerwein, H.
- Pfiffner, J. J., and North, H. B., new adrenal base, II, 127. 17- β -Hydroxyprogesterone, II, 134. Dimethyl sulphone, constituent of adrenal gland, III, 895.
- Pfeiderer, H., bioclimatology of the skin, III, 504.
- Pfing, F., and Jungheim, H., influence of high-altitude flights on whooping-cough, III, 795.
- Pflugk, A. von, reconstruction of shape of eye by means of carbon dioxide freezing microtome, III, 181.
- Pfuhl, W., demonstration of lymphatics by trypan-blue, III, 463.
- Phalnikar, N. L., and Bhide, B. V., constitution of sulphur nitride, I, 58, 246.
- and Nargund, K. S., tautomerism of phenylbutenoic acids, II, 129.
- Phelps, K. See Wright, G. W.
- Philippoff, W. See Hess, K., and Kiessig, H.
- Philips, B. See Gross, H.
- Phillips, A. H. See Hess, H. H.
- Phillips, A. W. See Worrall, D. E.
- Phillips, E. O. See Morrell, R. S.
- Phillips, E. W., time required for production of hay fever by newly encountered pollen, sugar beet, III, 339.
- Phillips, J., Brief, B. J., Sutton, T. S., and Mills, J. W., hermaphroditism, III, 733.
- Phillips, L. See Britton, H. T. S.
- Phillips, L. W. See Fuller, H. Q., and Parker, W. L.
- Phillips, M., magnetic moments of light nuclei, I, 144. Multiple radiation probabilities in light nuclei, I, 342.
- Phillips, Max, and Davis, B. L., hemicelluloses of lucerne hay, III, 832.
- Goss, M. J., Davis, B. L., and Stevens, H., composition of various parts of the oat plant with reference to formation of lignin, III, 362.
- See also Weihe, H. D.
- Phillips, P. H., and Engel, R. W., histopathology of chicks deficient in the chick antidermatitis factor or pantothenic acid, III, 323.
- See also Engel, R. W., Evans, R. J., and Lardy, H. A.
- Phillips, R. A., and Gilder, H., effect of hypophysectomy on percentage of body-weight present as muscle in rat, III, 899. Relation of age, nutrition, and hypophysectomy to absorption of glucose from gastro-intestinal tract in rat, III, 907.
- See also Hinsey, J. C.
- Phillips, R. B., and Sheard, C., amaurosis fugax: effect of centrifugal flying, III, 893.
- Phillips, R. F., and Powell, H. M., crystal structure of di-*n*-propylmonocyno-gold, I, 62.
- Phillips, R. L. See Ely, J. O.
- Phillips, W. A. See Young, L. E.
- Phillipson, A. T., movements of pouches of stomach of sheep, III, 907.
- and Innes, J. R. M., permanent stomach fistulae in ruminants, III, 907.
- Phillis, E., and Mason, T. G., transport in the cotton plant. VII. Simultaneous changes in production and distribution of dry matter under varying potassium supply, III, 80.
- Philpot, F. J., inhibition of adrenaline oxidation by local anaesthetics, III, 248.
- Philpot, (Miss) J. P., Rhodes, B. C., and Davies, C. W., determination of mobilities and dissociation constants by means of conductivity titrations, I, 165.
- Philpot, J. St. L., use of thin layers in electrophoretic separation, I, 133.
- See also Ogston, A. G.
- Phipps, T. E. See Johnson, A. A.
- Photakis, B. A., and Libérato, S. N., changes in adrenal glands during infections and intoxications, III, 642.
- Pianetto, M. B., coronary arteries of dog, III, 292.
- Piatnitzki, B. A., extinction of phosphorescence of acetophenone at the temperature of liquid air, I, 282.
- Piatt, J., nerve-muscle specificity in forelimb of *Triturus*, III, 797.
- Piaw, C. S., new glass in the binary system magnesium fluoride-silica, I, 66.
- Picard, C. W., and Spring, F. S., triterpene resins and related acids. X. β -Amyradienol. XI. Oxidation of acetyloleanolic acid and of methyl acetylleanolate with perbenzoic acid, II, 352, 377.
- Piccardi, G., influence of "T" and "R" activation on colloidal arsenic trisulphide, I, 112.
- and Botti, E., influence of "T" and "R" activation on gold colloids, I, 23.
- Piccoli, L. J., Spinapolice, M. E., and Heeht, M., pharmacology of devil's club root (*Fatsia horrida*), III, 338.
- Pichat, P., bactericidal action of aurothiogluucose and gold calcium keratinate on homogeneous cultures of Koch's bacillus *in vitro*, III, 356.
- Picht, J., electron optics (electron lens with inter-grid, electron mirror, immersion lens), I, 101.
- Pick, H., binding of stoichiometrical excess of sodium in sodium chloride crystals containing strontium chloride, I, 55.
- See also Kuchler, L.
- Pickard, H. B. See Gucker, F. T., jun.
- Pickavance, T. G. See Powell, C. F.
- Pickels, E. G., and Bauer, J. H., ultracentrifuge studies of yellow fever virus, III, 937.
- See also Baner, J. H., Smadel, J. E., and Smith, E. L.
- Picken, L. E. R., finer structure of biological systems, III, 374.
- Pickering, G. W., and Prinzmetal, M., renin and urine formation, III, 744.
- See also Hill, J. R.
- Pickering, W. H., preliminary experiments with a cosmic-ray telescope, I, 341.
- and Neher, H. V., latitude effect for cosmic-ray showers, I, 341.
- Pickett, (Miss) L. W., vibrational analysis of absorption spectrum of furan in the Schumann region, I, 243.
- Pickles, A. T., and Sucksmith, W., magnetic study of the two-phase iron-nickel alloys, I, 318.
- Pidra, J. See Lebduška, J.
- Pièce, G. See Dubonx, M.
- Piekara, A. See Zakrzewski, K.
- Piekarski, G., optical and electron microscopic investigations of bacterial cell nucleus, III, 352.
- Piel, E. V., and Purves, C. B., action of titanium tetrachloride on benzylglucopyranoside tetra-acetates, II, 6.
- Pielemeier, W. H., Saxton, H. L., and Telfair, D., supersonic effects of water vapour in carbon dioxide and their relation to molecular vibrations, I, 104.
- Pieper, A., intra-epithelial nerves in calf's foot, III, 466.
- Pierce, C. I. See Barnes, R. P.
- Pierce, H. B., Dagg, R. G., Meservey, A. B., and Simcox, W. J. [with Howe, D. H., and Foote, M. W.], retention of calcium and phosphorus by pre-school children, III, 856.
- See also Hartman, E.
- Pierce, J. S. See Harris, S.
- Pierce, R. H. See Austin, J. B.
- Pierce, W. C., Torres, O. R., and Marshall, W. W., qualitative spectrographic analysis in the arc with graphite electrodes, I, 172.
- Piéron, H., and Segal, J., retroactive facilitation in tactile stimulation, III, 21.
- Piery, M., and Enselme, J., reactions of acclimatisation and of non-adaptation [at high altitudes], III, 18.
- Pietenpol, W. B., and Devaney, T. E., anodic properties of the aluminium cell, I, 362.
- Pietrzok, H. See Hüchel, W.
- Piette, L., action of colchicine on plants, III, 272.
- Piggot, C. S., and Urry, W. D., radium content of an ocean-bottom core, I, 44.
- See also Curtiss, L. F.
- Pighini, G., endocrine changes in guinea-pigs exposed to monochromatic light, III, 576. Choline-esterase in sciatic nerve of vitamin-B₁-deficient pigeons, III, 673.
- Pigman, W. W., specificity of various sweet almond emulsin preparations, III, 348. Action of almond emulsin on α -phenyl-d-lyxoside, III, 766.
- See also Helferich, B., and Isbell, H. S.
- Pigott, A. W., Weingrow, S. M., and Fitch, T. S. P., convulsions in chronic nervous diseases of infancy and childhood, III, 201, 394.
- Pigulevski, G., and Simonova, N., petroselic acid, II, 152.
- PiJoan, M. See Keeley, J. L.
- Pike, E. W., proposed new mechanism in excited neon, I, 342.
- Pike, J. See Anderson, B. W.
- Pikovski, M. See Doljanski, L.
- Pilgerstorfer, E. See Falta, W., and Grüneis, P.
- Pilgrim, F. J. See Cloke, J. B.
- Pillemer, L., Ecker, E. E., and Martensen, E. W., specificity of keratin derivatives, III, 421.
- Seifter, J., Kuehn, A. O., and Ecker, E. E., vitamin-C in chronic lead poisoning, III, 928.
- See also Ecker, E. E.

- Pillsbury, D. M., and Shaffer, B., cutaneous reaction to ointments and solutions of different pH, III, 157.
- Piltz, G. F. See Elwood, B. J., and Levine, H.
- Pilz, H. See Criegee, R.
- Pimentel, J. V. See Vilarino.
- Pincherle, L., partially inverted multiplets in Mg I, I, 385.
- Pincus, A. G. See Warren, B. E.
- Pincus, G., superovulation in rabbits, III, 738.
- and Graubard, M., oestrogen metabolism in cancerous and non-cancerous women, III, 655. Response of rat uteri to hormone injections, III, 660.
- and Saunders, B., maturation of human ovarian ova, III, 552.
- and Shapiro, H., parthenogenetic activation of rabbit eggs, III, 649.
- Pincus, P. See Fickling, B. W.
- Pincussen, L., influence of light rays on coagulation of plasma and fibrinogen, III, 283.
- Pinder, H. See Komm, E.
- Pinder, J. L., and Singer, J. H., examination and determination of 2-methyl-1:4-naphthoquinone, II, 135.
- Pines, H. See Ipatiev, V. N.
- Pines, J., experimental air embolism, III, 99.
- Pines, K. L. See Zwemer, R. L.
- Piness, G., Miller, H., Carnahan, H. D., Altose, A. R., and Hawes, R. C., relationships between foods as shown by skin test in 1000 children, III, 691.
- See also Miller, H.
- Ping, C., distribution of motor centres of normal and partly decorticated cerebrum of rabbit, III, 299.
- Pink, R. C., water-in-oil emulsions. III. Effect of relative phase volumes on type of emulsions stabilised by magnesium oleate, I, 160.
- Pinkerton, H., and Moragues, V., paraffinoma of lung with secondary tubercle-like lesions in liver and spleen, III, 683.
- Pinkston, J. O. See Farah, A.
- Pinkus, H., anatomy and pathology of skin appendages. I. Wall of intra-epidermal part of the sweat duct, III, 88.
- Pino, R. H. See Moehlig, R. C.
- Pinto, A. See Del Castillo, E. B.
- Piontelli, R., oxidation and reduction equilibria of metals and their ions in solution, I, 213. Cathode phenomena in the electrolysis of aqueous solutions of alkali salts or hydroxides. II., I, 367.
- Piper, C. S., use of perchloric acid in digestion of plant materials, III, 460.
- Pipes, D. M. See Vaughan, W. T.
- Piquet, and Marchand, bronchial aspiration in poisoning with asphyxiating gases, III, 478.
- Piram, S. See Tudoranu, G.
- Pirani, M., radiation properties of different substances within the temperature range 250–800°, I, 83. High-temperature laboratory furnaces, I, 301.
- Pirenne, M. H. See Hecht, S.
- Pirie, A., effect of lysozyme on union between a phage and the susceptible *Bacillus megatherium*, III, 613.
- Pirie, N. W. See Bawden, F. C.
- Pirona, M. See Masearelli, L.
- Pirquet, A. F. von, post-tetanic increase of muscular reactions following single stimuli, III, 479.
- Pirrone, F., constitution of cholesterol; oxidation by peracetic acid; reactions with di- and tri-chloroacetic acids, II, 170. Alicyclic compounds. V. Syntheses of β -keto-amines from 2-, 3-, and 4-methylcyclohexanone, II, 179. Hydroxyquinolines. IV. Mercurated derivatives of 8-hydroxyquinoline, II, 239.
- See also De Fazi, R.
- Pirson, A. See Noack, K.
- Pirtea, T. I., gravimetric determination of antimony by means of 8-hydroxyquinoline, I, 82. Determination of cerium with 8-hydroxyquinoline, I, 232.
- Pisharoty, P. R., Young's modulus of diamond, I, 436.
- Piskozub, W., effect of copper sulphate on carbohydrate metabolism, III, 433.
- Pitkovskaja, Z. N., goyazite in the breccia of the Romny and Issachki salt domes, I, 239.
- Pitt-Rivers, R. V. See Harington, C. R.
- Pittaluga, G., Sternberg cell and megakaryocyte, III, 183. Pathogenesis of erythroblastic anemias of adult, III, 628.
- Pittel, C. M., and Rabinerson, A., development of structure in dilute ferric hydroxide sols, I, 439.
- Pittman, F. K., detection and elimination of phosphate in qualitative analysis by means of zirconium salts, I, 444.
- Pittman, M., and Fraser, H. F., determination of V factor in urine and tissues of normal dogs and of dogs with black-tongue by use of *Hamophilus parainfluenzae*, III, 750.
- Pitts, H. H., and Packham, E. A., haematology of sternal marrow in women, III, 5.
- Pitts, R. F., Magoun, H. W., and Ranson, S. W., localisation of medullary respiratory centres in cat, III, 104. Inter-relations of respiratory centres in cat, III, 104.
- Pitzer, K. S., heat capacities, heats of transition and fusion, and entropies of ethylene dichloride and dibromide, I, 201. Thermodynamics of *n*-heptane and $\beta\beta$ -trimethylpentane, including heat capacities, heats of fusion and vaporisation, and entropies, I, 313. Vibration frequencies and thermodynamic functions of long-chain hydrocarbons, I, 430.
- Pizzolato, P. See Koven, A. L.
- Placinteanu, I. I., Dirac equation for a body with variable mass, I, 92.
- Placzek, G. See Bethe, H. A.
- Plagge, J. C., effect of thymectomy at birth on spermatogenesis in the rat, III, 733.
- and Lamar, J. K., imperforate vagina in adult female rat, III, 212.
- Plain, G. J., Herb, R. G., Hudson, C. M., and Warren, R. E., γ -rays from aluminium due to proton bombardment, I, 140.
- See also Hudson, C. M., and Young, V. J.
- Plaksin, I. N., and Schabarin, S. K., physico-chemical conditions of solution of gold and its alloys in solutions of cyanides. I., I, 415.
- Plambeck, L., jun. See Marker, R. E.
- Plank, C. J., and Hunt, H., viscosity of liquid ammonia, I, 105.
- Plankenhorn, E. See Freudenberg, K.
- Plant, S. G. P., and Whitaker, W. D., structural problems in the indole group. IV. Alternative method for determining structure of nitro-compounds, II, 189.
- Plasencia, H. T., Bragg-de Broglie method of focussing application to double-crystal X-ray spectrographs, I, 271. Spanish standard for international roentgen unit, III, 825.
- Plass, E. D. See De Gowin, E. L., and Oberst, F. W.
- Plass, M. See Euler, H. von.
- Plate, A. F., synthesis of monosubstituted homologues of cyclopentane having a normal side-chain, II, 9.
- See also Kazanski, B. A.
- Platow, A. M., sodium furoate as preservative [of thiosulphate and starch solutions], I, 231.
- Platt, B. S. See Yang, E. F.
- Plattner, E. B. See Struck, H. C.
- Plattner, P. A., and Lemay, L., sesquiterpenes. XLIV. Carbon skeleton of guaial and of guaiazulene, II, 377.
- and Wyss, J., sesquiterpenes. XLV. Synthesis of 1:4-dimethylazulene, II, 338.
- Platz, B. R. See Schneider, H. A.
- Platzek, P. See Hermans, P. H.
- Plaut, A., hemangioendothelioma of lung, III, 591.
- Plaut, J. See Weinstein, W.
- Plehw, H. J. von, effect of deoxycorticosterone in hyperthyroidism, III, 497. Creatinuria in hyperthyroidism and vitamin-C, III, 806.
- Pleskov, V. A., overvoltage of hydrogen in liquid ammonia, I, 28.
- and Igamberdiev, I., viscosity of ammonia-water mixtures at 20°, I, 203.
- Plesiewicz, S., and Manduk, W., potentiometric method of measuring coefficients of diffusion of electrolytes in aqueous solution, I, 220.
- Plessset, M. S., and Brown, F. W., scattering of slow neutrons by protons, I, 139.
- and Ewing, D. H., nuclear excitation functions for high-energy charged particles, I, 385.
- See also Brown, F. W.
- Pletenev, S. A., cathodic polarisation in electrolysis of molten salts, I, 28.
- and Safonov, A. P., surface molecular phenomena in the process of formation of lithographic or offset moulds. I. Adsorption of oleic acid on calcium carbonate, I, 23.
- Plewes, B., pulmonary embolism, III, 192.
- Plimmer, R. H. A. See Macara, T. J. R.
- Plimpton, N. C., basophil leucocytes and myelocytes after local injection of ventriculin, III, 703.
- Plötner, K. See Mancke, R.
- Ploetz, T., enzymic degradation of polymeric carbohydrates. II. Enzymes of dry-rot fungus (*Merulius lacrymans*). III. Behaviour of limo wood toward ethylenediamine-copper oxide solution and enzymic degradation of the main fractions. IV. Comparative degradation of some isolated constituents of wood by snail enzyme. V. Enzymic degradation of some natural materials containing lignin. VI. State of combination of lignin in wood, II, 100; III, 343, 695.
- See also Freudenberg, K.
- Plötze, E., and Person, H., macromolecular compounds. CCXXXIV. X-Ray study of polymeric-homologous cellulose fibres, I, 71.
- Plonk, D. See Ginnings, P. M.
- Plotnikov, V. A., Scheka, I. A., and Jankelevitch, Z. A., dielectric constant and dipole moment of aluminium bromide, I, 10.

- Plotz, M., asthmatoïd heart failure, a form of left ventricular failure and its differentiation from bronchial asthma, III, 474.
- Plouvier, V. See Rabaté, J.
- Plucker, J., 3rd, and Amstutz, E. D., preparation of 2-furylacetic acid, II, 311.
- See also Ryan, J. F.
- Plum, P., and Warburg, E., hæmatological changes, especially megalo-cytic anæmia, in regional ileitis, III, 282.
- See also Dam, H.
- Plumier, M., effect of sodium evipan anæsthesia on urinary secretion in dog, III, 313.
- Plummer, N., and Ensworth, H. K., sulphapyridine in pneumonia, III, 244.
- and McLellan, F., sulphapyridine renal calculi in man, III, 599.
- Pluss, O., permeability of dentine, III, 745.
- Plyler, E. K. See White, J. W.
- Pobeguïn, T., reaction of fresh mucilage of *Tradescantia virginica*, L., in presence of tartaric acid solutions, III, 694.
- Pochettino, A. See Lovera, G.
- Pochil, P. F., determination of the rate of diffusion (mobility) of molecules of surface-active substances in the interface solid-gas, I, 23.
- Pochon, J., natural groups in cellulolytic anaërobies, III, 75.
- Podashevski, M. M., and Polonski, A. M., influence of temperature on the ultra-violet luminescence spectrum of sodium and potassium chloride crystals, I, 8.
- Podhradský, L. See Gömöri, P.
- Podjapolskaja, A. See Medvedev, S.
- Poe, C. F. See Field, J. F., and Larsen, J.
- Poethke, W., titration of morphine, II, 320.
- Pogăncău, P., and Tintea, H., obtaining absorption spectra, I, 133.
- See also Dima, G. A., and Tintea, H.
- Poggi, R., condensations of cyclanones, II, 178.
- and Sacchi, (Signa.) S., condensations of cyclohexanone and its derivatives with aromatic aldehydes, II, 280.
- See also Dumazert, C.
- Pohl, H. A. See Flexner, L. B.
- Pohle, F. J., and Stewart, J. K., determination of prothrombin, III, 283. Plasma-prothrombin and effects of vitamin-K in patients with liver or biliary tract disease, III, 469.
- Pohle, P. J. See Strauss, M. B.
- Pohlman, A. G., greater disability for hearing high tones in cases of conduction deafness, III, 117. Objections to accepted interpretation of cochlear mechanics, III, 118. Restoring forces in mechanics of audition, III, 205.
- Pohlmann, R. See Florstedt, H.
- Pojer, J., action of vitamin-C in Addison's disease, III, 210.
- Pokrovskaja, E. S., and Stepantzeva, T. G., polycyclic homologues of naphthalene and tetrahydronaphthalene, II, 161.
- and Suschtschik, R. J., hydroaromatic hydrocarbons of the naphthalene and tetrahydronaphthalene series, with cyclopentane as substituent, II, 160.
- Pokrovskaja, T. L. See Borovik, S. A.
- Pokrovski, A. A., biochemistry of central nervous system. I. Protein metabolism of central nervous system of rabbits, III, 718.
- Polack, S. S. See Bulmer, F. M. R.
- Polak, B. S., improvement of respiration by adrenaline, III, 498.
- Polak, S. See Stern, V.
- Polan, C. G. See Woldman, E. E.
- Polanyi, M. See Bennett, A. R., and Butler, E. T.
- Polányi, V. See Aloisi, M.
- Polatin, P., Friedman, M. M., Harris, M. M., and Horwitz, W. A., vertebral fractures in induced convulsions, III, 890.
- Poleff, L., culture *in vitro* of corpuscles of trachoma, III, 114.
- Poleshaev, L. V., ontogenetic limitation of regeneration of hind limbs in *Rana temporaria* tadpoles, III, 178. Restoration of regenerative power in limbs of *Anura*, III, 178.
- and Ginsburg, G. I., regenerative power in the tailless amphibian limbs, III, 42.
- Polesitski, V. E., and Petriak, K. A., formation and fission of transuranium nuclei, I, 142.
- Polesitzki, A., "chief" and "auxiliary" valency in complex compounds and mobility of co-ordinated particles, I, 171. Exchange of bromine ions between silver bromide and bromide solution, I, 207.
- and Ratner, A., neutron sources of long time action, I, 3.
- Poley, W. E., Moxon, A. L., effects of selenium poisoning on hatchability, III, 336.
- Polgár, A. See Zechmeister, L.
- Polgár, F., new diagnostic sign in chest radiography, III, 296.
- Poli, E., serum-electrolytes in catarrhal jaundice, III, 97.
- Policard, A., use of isotopes as indicators in biological processes, III, 240. Quantitative data on large intestine, III, 280.
- and Boucharlat, M., histological origin of images shown in pulmonary radiograms, III, 625.
- and Rollet, J., effect of cobalt mineral dusts (smaltine and cobaltine) on conjunctival tissue, III, 605. Prevention of the harmful effect of silica dust on the conjunctival tissue by metallic aluminium, III, 605.
- Polikarpova, E., influence of external factors on development of sex glands of sparrow, III, 657.
- Poling, C. E. See György, P.
- Poljakov, M. V., and Genkina, R. I., mechanism of formation of nitrogen oxides in explosion of combustible mixtures. II, I, 76.
- and Vainstein, F. M., kinetics of slow oxidation of ethylene, I, 76.
- See also Korneieva, A. V.
- Poljanin, V. A., mineralogy and genesis of mesozoic bauxites of the eastern slope of Ural Mountains, I, 47.
- Polkanov, A. A., gigantic aegirite-augite crystals from the plutonic rocks of Greymakha-Vyrmes (Kola peninsula), I, 180.
- Pollacci, G., and Bergamaschi, M., effect of vitamins on seeds of orchids, III, 777.
- and Gallotti, M., glucosides of *Leucophyllum minus*, III, 777.
- Pollack, H., Dolger, H., Ellenberg, M., and Cohen, S., proposed test to measure vitamin-B₁ saturation in man, III, 750.
- Pollák, O. J., and Joël, C. A., sperm examination, III, 131.
- See also Joël, K.
- Pollard, A., chemical composition of active agent of Rous sarcoma no. 1 and related products, III, 45.
- Pollard, C. B. See Anderson, G. W., Bain, J. P., and Singleton, F. G.
- Pollard, E., mass and energy levels of ²³S, I, 2. Mass and stability of ¹⁴C, I, 51. Energy and half-life of ¹⁰Be, I, 140. Masses of stable nuclei from ²⁰Ne to ⁵⁷Fe, I, 337.
- Davidson, W. L., jun., and Schultz, H. L., protons from the transmutation of boron by deuterons, I, 339.
- and Watson, W. W., transmutation of the separated isotopes of neon by deuterons, I, 340.
- Pollard, H. M., and Harvill, T. H., painless myocardial infarction, III, 563.
- See also Curtis, A. C.
- Polley, H., approach to saturation in the magnetisation of nickel between 135° and -253°; variation of the crystal energy with temperature, I, 200.
- Pollister, A. W., structure of Golgi apparatus in amphibian tissue, III, 555.
- Polljak, S. See Schtern, V.
- Pollock, G. A., effect of theelin on fracture repair, III, 810.
- Pollock, H. C., separation of alloys and isotopes by the centrifuge, I, 331.
- See also Kingdon, K. H.
- Pollock, R. See Wintrobe, M. M.
- Pollock, W. See Krichesky, B.
- Polonovski, E. M., exposés annuels de biochimie médicale. deuxième série. [Annual Reports on Medical Biochemistry. 2nd series], III, 946.
- Polonovski, M., structure of amine oxides. II. Tautomerism of gessenerine, II, 197. Determination of α-amino-acids and of polypeptides in biological systems, III, 619.
- [with Boulanger, P., and Taghavi, H.], structure of amine oxides. I. N-Oxides and NN'-dioxides of tertiary amines, II, 156.
- Gonnard, P., and Glotz, (Mlle.) G., triketohydrindyl- (ninhhydril-) and alloxanyl-carbamides and their constitutions, II, 94.
- Polonski, A. M. See Podashevski, M. N.
- Polskin, L. J. See Russell, W. C.
- Polson, A., electrophoresis of animal viruses and their neutralising antibodies in low concentrations, III, 267.
- Polvogt, L., and Babb, D. C., histologic studies of Eustachian tube of individuals with good hearing, III, 845.
- Pomales-Lebrón, A., and Morales-Otero, P., preservation of oxalated plasma clot for fibrinolytic tests, III, 10.
- Pomeranchuk, J. See Migdal, A.
- Pomerantz, A., and Connor, R., alkylation of α-sulphonylamides, II, 8. α-Alkane-sulphonylamides, II, 71.
- Pomerantz, L. See Mulinos, M. G., and Sntro, C. J.
- Pomerantz, M. A., instability of the meson, I, 92.
- Pompeia, P. A. See Wataghin, G.
- Poncher, H. G., and Kato, K., vitamin-K and hæmorrhagic disease of newborn, III, 880.
- See also Kato, K.
- Ponder, E., and Hyman, C., acceleration of hæmolysis in relation to chemical structure. II. Straight-chain alcohols, III, 94.

- Ponder, E., and Velick, S. F., fixed framework of reticulocytes produced by injection of phenylhydrazine, III, 282.
See also Dawson, H.
- Ponizovskaja, V. L. See Bruevitsch, S. V.
- Pontecorvo, G. See Muller, H. J.
- Ponthus, P. See Bonnet, P.
- Poo, L. J., Lew, W., Dee, D. D., and Addis, T., protein anabolism in organs and tissues of pregnant rats at different levels of protein consumption, III, 859.
See also Addis, T.
- Pool, M. L. See McMaster, H., and Stone, K. L.
- Pool, R. M. See Walsh, G.
- Pool, T. L., and Cook, E. N., sulphathiazole and sulphamethylthiazole in treatment of infections of the urinary tract, III, 862.
- Pool, W. O. See Ralston, A. W.
- Pop, A. See Nestoresco, N., and Spacu, G.
- Popa, G. T., changes in serum of bird and mammal due to (I) stimulation of somatic and sympathetic nerves and (II) injection of salts of potassium and calcium, III, 288. Retention of activity of portions of ewe's pituitary anterior lobe over twenty days *in vitro*, III, 401.
- Pope, F. B. See Degnan, W. M.
- Pope, O. A. See Matchett, J. R.
- Popesco, M., cardiovascular action of urea, III, 250.
See also Simici, D.
- Popják, G., migration of hypophyseal colloid into brain, III, 401. Pathway of pituitary colloid through hypothalamus, III, 732.
- Popkin, A. H. See Whitmore, F. C.
- Popoff, W. W., regeneration of lens from body epithelium following its implantation into optic cup in amphibian embryos, III, 638.
- Popov, P. G., ammonium persulphate reaction for manganese, I, 270.
- Popov, V. V., lens-forming ability of eye of adult amphibia, III, 203. Species specificity in lens-forming properties of the eye anlage, III, 372.
- Popova, T. A., direction of crystallisation in quaternary systems, I, 257.
- Popova, Z. N. See Schesiakov, V. E.
- Popovát, M., indices of texture of sediments, I, 135.
- Popp, H. W. See Molivaine, H. R. C.
- Popp, W. O. See Stasney, J.
- Popper, E. See Spacht, G.
- Popper, H., histological demonstration of vitamin-A in rats by means of fluorescence microscopy, III, 512. Histological demonstration of vitamin-A in human liver by fluorescence microscopy, III, 586.
See also Arkin, A., and Kirshbaum, J. D.
- Popper, H. L., and Necheles, H., pathways of enzymes into blood in acute damage of pancreas, III, 501.
- Popper, K. R., interpretation of nebular red-shifts, I, 137, 276.
- Poppick, I., and Lehrman, A., parachor of aluminium bromide in benzene, I, 12.
- Pora, E. A., permeability of skin of teleostei, III, 225.
- Porai-Koschitz, B. A., and Efros, A. M., fluorene series. I. Condensation of 2:7-diaminofluorene with phthalic anhydride, II, 290.
and Nikiforova, O. K., fluorene series. II. Preparation of vat diminazole dyes of the fluorene series, II, 291.
- Porcelli, L. See Kreinin, S.
- Poremski, V. See Sannié, C.
- Porri, G. See Margaria, R.
- Porter, B. H. See Szymanowitz, R.
- Porter, E. F., and Pappenheimer, A. M., antigen-antibody reactions between layers adsorbed on built-up stearate films, III, 254.
- Porter, G. V. See Surfleet, H.
- Porter, H. C., ignition and ignitibility, I, 390.
- Porter, J. R., and Hale, W. M., effect of sulphanilamide and sulphapyridine on experimental infections with *Listerella* and *Erysipelothrix* in mice, III, 245.
and Pelczar, M. J., jun., biotin (bios II_B, vitamin-II), an essential growth factor for certain staphylococci, III, 771.
See also Pelczar, M. J., jun.
- Portier, P., and De Rorthays, R., nourishment assimilated by fully developed Lepidoptera, III, 510.
- Portillo, R., and Tánago, J. G., potentiometric study of complex thiosulphates; alkaline-earth silver thiosulphates, I, 328.
See also Santos Ruiz, A.
- Porto, J., and De Soldati, L., microscopic alterations in heart of dogs suffering from avitaminosis-B₁, III, 289.
- Posnjak, E., deposition of calcium sulphate from sea-water, I, 396.
- Post, A. See Penner, A.
- Post, H. W., reaction of ortho-esters with aldehydes, II, 243.
and Hofrichter, C. H., jun., silico-organic compounds. II. Reactions of silico-ortho-esters with acid anhydrides, II, 325.
- Post, J. See Patekm, A. J., jun.
- Post, M., essential progressive atrophy of iris, III, 114.
- Poster, F. P., method of ensuring verticality of Westergren or Rourke-Ernstene sedimentation tube, III, 557.
- Posternak, T., and Jacob, J. P., biochemistry of the lower fungi. III. Pigment of *Penicillium citreo-roseum*, Dierckx, II, 182.
- Posthuma, J. H., and De Haas, J. H., result of providing lactic acid milk to infants from the Infant Welfare Centres in Batavia, III, 913.
- Postmus, S. See Koefoed, H. G.
- Postovski, I. J., and Lundin, B. N., carcinogenic compounds. I. Synthesis of 9-azacholanthrene and meso-alkyl derivatives of 1:2- and 3:4-benz-acridine, II, 260.
See also Goldirev, L. N.
- Póswiat, D., Raman effect in fluorene, I, 57.
- Potamian, E. See Chaborski, G. L.
- Potapenko, G. See Bateman, J. B., and Overbeek, J. van.
- Potop, L. See Slatineanu, A.
- Pottenger, F. M., jun., and Simonsen, D. G., heat-labile factors necessary for proper growth and development of cats, III, 231.
- Pottenger, J. E., all-glass instruments for autopsy of guinea-pigs and other small animals, III, 778.
- Potter, N. A. See Kidd, F.
- Potter, R. M. See Andrews, W.
- Potter, T. S., and Ward, E. N., development of megakaryocyte in adult mice, III, 704.
- Potter, V. R., inhibition of succinoxidase by cozymase, III, 532.
See also Frost, D. V.
- Potts, R. H. See Ralston, A. W.
- Potvin, R., and Ouellet, C., catalytic oxidation of hydrogen on platinum; chemiluminescence and ionisation, I, 168.
See also Steacie, E. W. R.
- Poulenc-Ferrand, E., ferritartrates, II, 153.
- Pound, J. R., oxidation of solutions of ferrous chloride in alcohols, I, 30. Oxidation of solutions of ferrous salts, I, 31. Ceric sulphate in volumetric analysis, I, 445.
See also Crimmins, E.
- Pounden, W. D. See Lardy, H. A.
- Pourbaix, N. See Jeener, R.
- Pourbaix, Y., styryl 430 and metabolism of glucose by yeast; effect of varying quantities of sodium nucleate, III, 261.
See also Maisin, J.
- Poussin, J. de la V., new copper-gold deposit in Tanganyika, I, 380.
- Powell, C. F., photographic method in nuclear physics, I, 140.
May, A. N., Chadwick, J., and Pickavance, T. G., excited states of stable nuclei, I, 339.
See also Heitler, W.
- Powell, G., and Bembry, T. H., [projected] synthesis of cannabinoil, II, 380.
See also Salmon, M. R.
- Powell, H. M., and Clark, D., crystal structure of phosphorus pentabromide, I, 349.
Clark, D., and Wells, A. F., crystal structure of phosphorus pentachloride, I, 150.
See also Hnse, G., and Phillips, R. F.
- Powell, J. See Black, D. A. K.
- Powell, L. S., and Smith, H. S., eye studies following lumbar puncture, III, 802.
- Powell, N. B. See Hamblen, E. C.
- Powell, W. M., convenient light source for a ten-inch Wilson cloud chamber, I, 374. Photon production of mesotrons, I, 427.
- Power, M. D. See Wilson, D. M.
- Power, M. H. See Tooke, T. B., jun., and Wakefield, E. G.
- Powers, B. R., Ide test for syphilis, III, 689.
- Powers, J. L., and Cataline, E. L., crystalline tannin from bark of *Acer spicatum*, III, 618.
and Powers, W. E., α - and β -amyrin from bark of *Viburnum opulus*, III, 618.
- Powers, P. N., Goldsmith, H. H., Beyer, H. G., and Dunning, J. R., dependence of neutron interaction with nuclei on neutron energy, I, 383.
See also Carroll, H.
- Powers, W. E. See Powers, J. L.
- Powers, W. H. See Iddles, H. A.
- Powick, W. C. See Chapin, R. M.
- Powney, J., and Wood, L. J., properties of detergent solutions. IX. Electrophoretic mobility of oil drops in detergent solutions. X. Electrophoretic mobilities in detergent solutions, I, 114, 162.
- Poyet, E. B. See Samuels, L. T.
- Poynter, H., testis hormone secretion in rat under conditions of vasectomy or isolation, III, 646.
- Pozzi, F. See Foresti, B.
- Prakash, B. See Bhatnagar, S. S.
- Prakash, S. See Dube, H. L.
- Prasad, B. See Chakravarti, A. S., and Srinivasan, M. K.
- Prasad, M., and Dharmatti, S. S., molecular structure of selenium and tellurium compounds, I, 313. Molecular structure of selenium compounds determined by magnetic method, I, 434.

- Prasad, M., Kapadia, M. R., and Thakar, V. C., unit cell of the crystals of *p*-aminobenzoic acid, I, 100.
- and Mathur, K. N., sodium oleate gels in pinene, I, 293.
- and Modak, K. V., viscosity of stannic phosphate gels during setting, I, 321.
- Naqvi, M. A., and Shetgiri, V. N., heterogeneous reaction between chromic sulphate and manganese dioxide, I, 31.
- See also Shanker, J.
- Prater, A. N., sealable absorption microtube, I, 273.
- and Haagen-Smit, A. J., excystment of protozoa; isolation of crystalline excystment factors for *Colpoda duodenaria*, III, 451.
- See also Haagen-Smit, A. J.
- Prates, M., anatomic-pathological characteristics of liver cancers of natives of Mozambique, III, 425.
- Pratesi, P., transformation of tetrabromopyrrole, II, 188.
- and Berti, V., molecular association of pyrrole aldehydes, II, 188.
- Prato, G. S., See Sharpless, G. R.
- Pratt, C. L. G., secretin and gastric secretion, III, 415. Ageing of fowl plasma, III, 705.
- See also Mellanby, J., and Myant, N. B.
- Pratt, E. J. See Rushton, E.
- Pratt, J. H. See Brugsch, T., and Golden, L. A.
- Pratt, R., and Albaum, H. G., nature of growth differences in two sorghum varieties. I. Influence of preliminary soaking on early growth and auxin content, III, 457.
- Prebble, E. D., sulphapyridine in gonorrhoea, III, 437.
- Prebus, A. See Burton, E. F.
- Preheim, D. V., lactation and growth in thyroidectomized rats, III, 894.
- Preis, E. M., ageing of sols and gels. IV. Syneresis in mercury acetamide gels, I, 411.
- Preiss, H. See Diels, O.
- Preiswerk, E., synthesis of soporifics, III, 926.
- Prelog, V., dicyclic heterocyclic compounds with a hetero-atom common to both cycles, II, 234.
- Present, R. D., dynamics of complex fission, I, 280.
- and Knipp, J. K., dynamics of complex fission, I, 343.
- Press, R., and Fearon, W. R., ultimate composition of biological material. III. Glandular tissues, III, 5.
- Preston, G. See Steward, F. C.
- Preston, G. D., age-hardening of copper-aluminium alloys, I, 250.
- Preston, R. D. See Kundu, B. C.
- Preston, W. M., absorption of the hydrogen line 1215.7 Å. by air, I, 275. Origin of radio fade-outs and the absorption coefficient of gases for light of wave-length 1215.7 Å., I, 310.
- Preuner, R., allergy. II. Relations between experimental asthma bronchiale and weather conditions, III, 870.
- Previtali, G., and Jacobziner, H., progressive facial and crossed hemiatrophy complicated by transient hypoglycemia, III, 798.
- Prévost, C., mechanism of benzoyloxylation of ethylenes by the iodine-silver benzoate complex, II, 172.
- Prévot, A. R., anaerobic flora of the human intestine; *Fusocillus girans* nov. sp., III, 453.
- and Boorsma, H. J., distribution and metabolism of nitrogen: their effects on activity of tetanus toxin, III, 171. Parallelism between the ratio of the polypeptide carboxyl to the amino+diamino+polypeptide carboxyl of the culture medium and tetanus toxigenesis, III, 266.
- and Veillon, R., anaerobic flora of the human intestine; biochemical characters of *Fusocillus girans*, III, 453. Carbohydrate fermentation by *Ramibacterium ramosoides* (Runenberg), P. 1938, III, 611.
- See also Berthelot, A., and Boorsma, H. J.
- Prianischnikov, A. A., and Genin, L. L., azetropes of 2-methylfuran, I, 290.
- Price, C. C., 5-nitro-6-methyl-2-naphthoic acid, II, 345.
- and Coyner, E. C., addition of hydrogen bromide to methyl methacrylate, II, 265.
- and Karabinos, J. V., dehydration of *cis*- and *trans*-2-phenylcyclohexanols, II, 276. 4-Phenylcyclohexene, II, 369.
- and Weaver, C., interaction of bromine with anthracene in dioxan, II, 74.
- Price, D., and Griffith, R., cleavage of unsaturated fatty acids, II, 152.
- See also Weinstock, H. H., jun.
- Price, I. N. O., preparation and standardisation of gold sol for use in Lange colloidal gold reaction, III, 718.
- Price, J. R. See Barber, H. N., Beale, G. H., and Lawrence, W. J. C.
- Price, J. W., time-temperature relationships in the incubation of the whitefish, *Coregonus clupeaformis* (Mitchell), III, 624.
- and Fowler, E. V., eggshell cap method of incubating chick embryos, III, 700.
- Miller, M., and Hayman, J. M., jun., relation of specific gravity to composition and total solids in normal human urine, III, 587.
- Price, W. C., and Tuttle, W. T., absorption spectra of ethylene, deuterethylene, and some alkyl-substituted ethylenes in the vacuum ultra-violet, I, 192.
- and Walsh, A. D., absorption spectra of conjugated dienes in the vacuum ultra-violet, I, 192.
- See also Laufer, M. A.
- Prichard, W. W. See Evans, H. M., and Smith, L. I.
- Prichotko, A., and Javnel, A., solid mixtures O₂-N₂, I, 215.
- See also Nikitina, A.
- Prickett, P. S. See Miller, N. J.
- Prickman, K. E., Lillie, H. I., Roth, G. M., and Fleming, R. G., use of extract of intestinal mucosa in treatment of vasomotor rhinitis, III, 709.
- Priddy, R. R., petrographic study of the Niagaran rocks of S.W. Ohio and S.E. Indiana, I, 85.
- Prideaux, E. B. R., and Henness, J. R., precipitation of aluminium hydrous oxide and its solubility in ammonia, I, 157.
- Prider, R. T. See Wade, A.
- Priest, H. F., combustion boat tongs, I, 395.
- See also King, J. F.
- Priestley, H. M., and Moness, E., intermediates in the preparation of sympathol [β -methylanino- α -*p*-hydroxyphenylethyl alcohol], II, 328.
- Priestley, H. M. See also Kharasch, M. S.
- Priestley, J. G. See Courtice, F. C.
- Prigge, R., active tetanus immunity. IV. Activation of tetanus antitoxins by aluminium compounds, III, 772.
- See also Istrati, G.
- Prileshaev, N. See Prileshaeva, E.
- Prileshaeva, E., and Prileshaev, N., auto-oxidation of halogen-substituted ethylenes, II, 148.
- Prim, L. See Hoyne, A. L.
- Primavesi, L. See De Robertis, E.
- Prince, H. E., and Secrest, P. G., jun., immunological relationship of giant, western, and common ragweed and marsh elder (*Iva ciliata*), III, 255.
- Pringle, E., Dockera, G. C., and Mitchell, R. H., agranulocytosis from sulphapyridine, III, 521.
- Pringsheim, P., and Vogels, H., fluorescence of heavy metal complexes in aqueous solution, I, 196.
- Prins, J. A. See Dekeyser, W.
- Prinzmetal, M., and Alles, G. A., central nervous system stimulant effects of *d*-amphetamine sulphate, III, 112.
- Lewis, H., and Leo, S., aetiology of hypertension due to complete renal ischaemia, III, 710.
- See also Pickering, G. W.
- Prior, A. M. See Taylor, G. L.
- Priou, R. See Dufraisne, C.
- Prislopanu, A. See Baltaceanu, G.
- Pritzker, H. G. See Solway, L. J.
- Pritzker, I. J., regularities in growth of chicken embryos, III, 465.
- Pritzker, J., and Jungkunz, R., simple apparatus for extraction of liquids with light and heavy solvents, I, 273.
- Privolnev, T. I., two types of respiration in course of embryonic development, III, 623.
- Probey, T. F., relation between trypanocidal and spirocheticidal activities of neosarphenamine, III, 253.
- Probst, F. See Fierz-David, H. E.
- Probst, O. See Wieland, H.
- Proca, A., type of elementary particle for which the wave-functions satisfy the Klein-Gordon equation, I, 280.
- Proca, G., extraction of lysogenic factors by glycerol, III, 455.
- Proctor, B. E., and Parker, B. W., microbiology of the upper air. III. Improved apparatus and technique, III, 933.
- Proetz, A. W., functional point of view in rhinology, III, 845.
- Prokofiev, M. A., and Botvinnik, M. M., synthesis of β -hydroxyvaline and α -methylamino- β -hydroxy-*n*-butyric acid, II, 157.
- Prokopenko, N. M. See Borovik, S. A.
- Prokopetz, E. I., and Pavlenko, A. V., reaction between dihydroanthracene and benzoquinone, II, 17.
- Proppe, H. See Antropoff, A. von.
- Prosd, K., and Bhattacharya, D. K., optical catalysis of the Raman effect and a new technique for its production, I, 8.
- Prosen, E. J. R. See Rossini, F. D.
- Proskurnin, M. A., and Vorsina, M. A., capacity of electrodes in dilute solutions, I, 165.
- Prosser, C. L., effects of salts on "spontaneous" activity in nervous system of crayfish, III, 391. Action potentials in nervous system of crayfish; effects of drugs and salts on synaptic transmission, III, 843.

- Prosser, C. L., and Buehl, C. C., oxidative control of "spontaneous" activity in nervous system of crayfish, III, 198.
- Prottschuchan, D. P. See Kuznetsov, A. M.
- Prout, W. A. See Harris, R. G.
- Provenzale, L., water content of plasma and corpuscles and plasma: corpuscle ratio after X-irradiation, III, 881.
- See also Stolf, G.
- Province, W. D. See Turner, K. B.
- Provisor, B. See Goldfarb, W.
- Provoost, M. See Arthus, A.
- Pruckner, F. See Stern, Adolf.
- Prudhomme, R. O., colorimetric determination of quinine in biological liquids and in organs, III, 275.
- Prüger, W., rate of evaporation of liquids, I, 314.
- Pruess, L. M. See Stiles, H. R.
- Prudeanu, E. I. See Longinescu, G. G.
- Prushankin, M. See Ravdin, T. S., and Riegel, C.
- Prutton, C. F. See Sheibley, F. E.
- Pryce, D. M., staining reticulocytes for demonstration purposes, III, 6.
- Pryde, A. W. H., and Rule, H. G., solvent effects with optically active saturated hydrocarbons, I, 197.
- Pryor, D. E., and Walker, J. C., toxicity [to fungi] of volatile compounds, III, 351.
- Pryor, M. G. M., hardening of the ootheca of *Blatta orientalis*, III, 746. Hardening of the cuticle of insects, III, 746.
- Pschenitzin, N. K., and Schabarin, S. K., preparation of ternary rhodium salts, I, 266.
- Pützin, B. V. See Grünberg, A. A.
- Ptschelin, V. A., structure and physico-chemical properties of surface layers of substances of high mol. wt. III. Molecular structure and surface properties of hair and wool keratin, I, 253. Role of the temperature factor in determining p_H by means of the glass electrode, I, 267.
- Pucher, G. W., and Vickery, H. B., mechanically-operated continuous liquid-extraction apparatus, I, 134. Determination of glutamine in plant tissues, III, 369.
- Wakeman, A. J., and Vickery, H. B., organic acid metabolism of buckwheat, III, 546. Relation of organic acids of tobacco to inorganic basic constituents, III, 944.
- See also Vickery, H. B.
- Puekett, W. O., ethyl methacrylate as mounting medium for embryological specimens, III, 786.
- and Newman, C. P., vinylite resin in preparation of corrosion of anatomical specimens, III, 873.
- Pugh, A. E. See Sondern, C. W.
- Pugh, B. See David, W. T.
- Pugh, C. E. M., Millon's reaction in urine of mentally defective patients, III, 744. Creatine-creatinine ratio [in phenylketonuria], III, 753.
- See also Penrose, L. S.
- Pugh, E. M. See Butler, E. H., jun.
- Pullinger, B. D., first effects on mouse skin of polycyclic hydrocarbons, III, 668.
- See also Mann, I.
- Pulver, R., determination of free flavin by dialysis and ultrafiltration, III, 594.
- and Verzáz, F., connexion between carbohydrate and potassium metabolism in the yeast cell, III, 767.
- Pummerer, R., and Schönamsgruber, M., hydroxyaldehydes. III. Preparation of δ -methoxyvaleraldehyde, II, 66.
- Pumphrey, R. J., hearing in insects, III, 301.
- and Rawdon-Smith, A. F., "frequency discrimination" in insects: new theory, III, 118.
- Schmitt, O. H., and Young, J. Z., local excitability and physiological response in squid giant axon, III, 391.
- Pund, E. R. See Hamilton, W. F.
- Punnett, R. C., genetic studies in poultry. X. Linkage data for sex chromosome, III, 465.
- Puntenney, I., and Osborne, S. L., temperature changes and changes in calibre of retinal blood vessels after short-wave diathermy, III, 115.
- Purdie, D. See Evans, R. C., and Mann, F. G.
- Purdum, R. B. See McGee, L. C.
- Purks, W. K., electrocardiographic findings following carotid sinus stimulation, III, 292.
- Purser, G. L., reproduction in cyprinodont, *Lebistes reticulatus*, III, 553.
- Purves, C. B. See Cramer, F. B., Heidt, L. J., and Piel, E. V.
- Purvis, O. N., vernalisation of fragments of embryo tissue, III, 545.
- Puryesz, B., and David, L., iodine content of urine, III, 667.
- Pusateri, S., jun., structure of commissural fibres of the sacral sympathetic nerve, III, 24.
- Puschel, E. See Cramer, G.
- Pushin, N. A., and Dimitrijević, D. M., binary system phenylhydrazine-*p*-chlorophenol, I, 164.
- Putman, I. J., jun. See Brewster, C. M.
- Putnam, T. J., athetosis [treated by chordotomy], III, 112.
- and Hoefer, P. F. A., cysteine hydrochloride as an anticoagulant for clinical use, III, 186.
- Putnoky, J., production of increased resistance by and against the Ehrlich-Putnoky rat carcinoma, III, 316. Early stages of growth in white rats of Ehrlich-Putnoky rat carcinoma, III, 507.
- See also Sümegi, S.
- Putschkov, P. V. See Nikolaeva, A. F.
- Putzeys, P., and Dory, E., absorption correction in the measurement of molecular scattering of light, I, 194.
- and Walle, P. van de, influence of electrolytes on electrophoretic mobility of serum-albumin and haemocyanin, I, 115.
- Puzzuoli, D. See De Barbieri, A.
- Pyke, M., distribution of vitamin-B₁ in plant families, III, 428.
- Pyle, J. J. See Brickman, L.
- Pyrar, L. N. See Long, H.
- Q.
- Quade, R. H., new staining technique for demonstration of capsular cells of sympathetic nervous system, III, 797.
- Quadt, U. F. See Weibke, F.
- Quartaroli, A., origin of electrolytic solution tension, I, 219.
- Quastel, J. H., significance of anoxæmia in modern psychiatric treatment, III, 299.
- and Wales, W. T., faulty detoxication in schizophrenia, III, 637.
- Quastel, J. H. See also Mann, P. J. G.
- Quayle, O. R., and Norton, H. M., mechanism of esterification of strong organic acids. I. Esterification of neopentyl alcohol with the chloroacetic acids, II, 265.
- Owen, (Miss) K., and Beavers, F. M., organic parachors. IV. Constitutive variations of the parachors of a series of *tert.* chlorides, I, 61.
- Quadrat-i-Khuda, M., and Ghosh, S. K., stereochemistry of monocyclic rings. I. Interconversion of methylcyclohexane into methylcycloheptane ring and synthesis of 4-methylcycloheptanone, II, 223.
- and Mukherjee, A., spiro-compounds. II. Synthesis of cyclopentanespirocyclopentanone, II, 93.
- Mukherjee, A., and Ghosh, S. K., essential oil from rhizome of *Acorus calamus*. I. Isolation and examination of calamol, II, 97. Oleo margosa from *Melia azadirachta*, neem oil. I. Isolation of the constituents of the oil, II, 284.
- and Ray, A. K., spiro-compounds. I. Preparation of cyclopentanespirocyclopentanone and cyclohexanespirocycloheptanone, II, 93.
- Quelet, R., chloroalkylation of phenolic ethers. I. Synthesis of methoxystyrenes. II. Syntheses of vinylanisole and of derivatives of methoxy- α -hydroxyethylbenzene, II, 167.
- and Allard, J., preparation of $\alpha\beta$ -dichloroethylanisole; transition to α - and β -chloromethoxystyrenes, II, 168.
- Quensel, P., minerals in Varutråsk pegmatite. I. Lithium manganese phosphates, I, 238.
- Querido, A., effect of vitamins and hormones on formation of blood, III, 468.
- See also De Jongh, S. E.
- Quevaullier, A. See Régnier, J.
- Quibell, T. H. H. See Madinaveitia, J.
- Quick, A. J., classification of hemorrhagic diseases due to defects in coagulation mechanism of the blood, III, 283. Intravenous modification of hippuric acid test for liver function, III, 311. Determination of prothrombin, III, 378. Clinical application of hippuric acid and prothrombin tests, III, 558. Prothrombin in preserved blood, III, 558. Thromboplastin reagent for determination of prothrombin, III, 790.
- and Grossman, A. M., nature of hemorrhagic disease of the new-born; delayed restoration of prothrombin level, III, 283.
- Quiggle, D. See Whitmore, F. C.
- Quigley, T. B. See Keeley, J. L.
- Quilico, A., isooxazole chemistry, II, 194.
- and Justoni, R., isooxazole group. VIII. Sulphonic derivatives. IX. isooxazolesulphonic acids, II, 142.
- and Rollier, M. A., X-ray study of aspergillin, I, 151. X-Ray researches on aspergillin, I, 151.
- Quilliam, J. C. See Duke-Elder, S.
- Quilliam, J. P. See Davson, H.
- Quimby, E. H., radium protection, I, 51.
- Quinland, W. S., and Cuff, J. R., primary carcinoma in negro; anatomic distribution of 300 cases, III, 816.
- Quinquaud, A. See Cheymol, J., Clerc, A., and Hazard, R.

- Quintin, (Mlle.), M., dissociation constant of azoimide, I, 294.
- Quiquerez, J. See Mondain-Monval, P.
- Quiring, D. P. See Crile, G. W.
- Quisenberry, J. H. See Roberts, E.
- Quittek, G. See Krzywaneck, W.
- Qnlvy, D. See Cuny, L.
- Quix, F. H., and Egmond, A. J. van, structure of otoliths in pike, III, 27.
- Qureshi, M., and Rao, P. N., effect of ultra-violet light on ferric hydroxide sols and their purification by photodialysis, I, 161.
- and Srivastava, L. M., chlorophyll. I. Isolation of chlorophyll ($a+b$) from local plants, III, 462.
- See also Ranganadham, S. P.; and Rao, S. S.
- R.
- Raab, W., relation of adrenal lipin-adrenaline complex to arteriosclerosis, III, 124. Action of light on metabolism in man, III, 159. Fever, arterial hypertension, and tachycardia after cerebral concussion, III, 200. Hormones and fat metabolism, III, 433.
- and Schönbrunner, E., angina pectoris, adrenals, and blood-iodine content, III, 188.
- Rabald, E., and Voss, H. E., occurrence and properties of lactation hormone, III, 658.
- Rabalé, J., *Schwenkia americana*, L., III, 695.
- and Plouvier, V., heterosides of *Amelanchier vulgaris*, Moench, var. *genuina*, R. and C., III, 368.
- See also Charaux, C.
- Rabe, P., and Höter, H., cinchona alkaloids. XXXI. Characterisation and preparation of epiquinine and epiquinidine, II, 144.
- Rabi, I. I. See Kellogg, J. M. B., and Kusch, P.
- Rabinerson, A., and Vladimirskaia, M. A., mitogenetic radiation accompanying neutralisation of strong acids and bases, I, 97.
- See also Pittel, C. M.
- Rabinkov, A. A. See Danilov, S. N.
- Rabinovitch, A. See Austoni, M. E.
- Rabinovitch, Jacques, optical and magnetooptical study of mixtures, I, 204.
- Rabinovitch, J. M. See Zagvozdkin, K. I.
- Rabinowitch, E., photogalvanic effect. I. Photochemical properties of the thionine-iron system. II. Photogalvanic properties of the thionine-iron system, I, 368.
- Rabinowitch, I. M., dangers of protamine-zinc-insulin, III, 305. Significance of post-prandial glycosuria in treatment of diabetes mellitus with protamine-zinc-insulin, III, 413.
- See also Fowler, A. F., and Lovell, M. E.
- Rabinowitch, J. See Décombe, J.
- Race, R. R. See Taylor, G. L.
- Rachele, J. R. See Benedetti-Pichler, A. A.
- Rachmilewitz, M., toxic effect of human urine on fibroblasts growing *in vitro*, III, 785.
- Racine, W., premenstrual swelling of parotid and submaxillary glands, III, 307.
- Rackemann, F. M., allergy, III, 444. Intrinsic asthma, III, 478. Drugs in asthma, III, 795.
- Racker, E., histidine detection and determination in urine, III, 224.
- Racz, C. See Audubert, R.
- Radczewski, O. E., Müller, H. O., and Eitel, W., hydrate formation with tricalcium silicate, I, 171. Hydrate formation with tricalcium aluminate, I, 171.
- Radermacher, G. See Schlomka, G.
- Radha, K. S. See Desai, R. D.
- Radle, W. F., and Beck, C. A., near ultra-violet absorption spectrum of benzene, I, 343.
- Radoitchitch, (Mlle.) M., absorption spectra of neodymium and samarium acetylacetonates in different solvents, I, 145.
- Radovici, A., Papazian, R., and Schächter, M., diabetes mellitus of pituitary origin, III, 207.
- Radsma, W., and Tjhan, G. I., influence of adrenaline on reduction of methylene-blue by muscle tissue; reversal of adrenaline effect by variation of pH , III, 728.
- Rădulescu, V. See Ionăscu, C. N.
- Raduschkevitch, L. V., mobilities and radii of smoke particles, I, 23.
- Radvan, S. See Angelescu, E.
- Raiffa, (Signa.) L. See Oddo, B.
- Raffaele, A. J. See Reifenstein, E. C., jun.
- Raffaelli, D., determination of ammonia and urea in milk, III, 420. Lactose and ash of milk, III, 420.
- Raffy, A., formation of flavin and anaerobic life of *Erémothericum ashbyi*, III, 262.
- See also Nollet, H.
- Ragan, C., Ferrebee, J. W., and Fish, G. W., effect of deoxycorticosterone acetate on plasma volume during ether anaesthesia and surgical operation, III, 411.
- See also Ferrebee, J. W.; and Kuhlmann, D.
- Ragno, H., volumetric determination of vanadium, I, 233.
- Ragno, M., reaction of mercuric acetate with *p*-phenetidine and *p*-anisidine, II, 239.
- Rahm, W. E., jun. See Strauss, H.
- Rahman, F., and Khastgir, S. R., dielectric constant of ionised air, III, I, 244.
- See also Khastgir, S. R.
- Rahn, H. See Kleinholz, L. H.
- Rai, R. N., sources of stellar energy; criticism of the Bethe-Gamow theory, I, 309.
- Raiford, L. C., and Alexander, K., migration of the carbamyl radical in *o*-aminophenol derivatives, II, 276.
- and Kaiser, D. W., action of nitrous acid on halogenated substitution products of 2:5-, 3:4-, and 3:5-dimethylphenol, II, 41.
- and Ravelly, M. F., action of bromine on vanillin, isovanillin, and their derivatives; modification of the directive influence of hydroxyl in these compounds, II, 174.
- Railing, W. E., specific heat of ethylene halides, I, 104.
- Raines, M. M., and Kazatschkova, S. V., photocolometric determination of fluorine in air, by means of zirconium-alizarin, I, 299.
- Rainsford, A. E. See Vermillion, G.
- Raison, (Mlle.) M. See Mangenot, G.
- Raistrick, B., Sapiro, R. H., and Newitt, D. M., liquid-phase reactions at high pressures. V. Polymerisation of cyclopentadiene and α -cyclopentadiene. VI. Explosive decomposition of cyclopentadiene, I, 29.
- Raistrick, H. See Anslow, W. K., and Clutterbuck, P. W.
- Raiziss, G. W., Sevérac, M., Moetsch, J. C., and Clemence, L. W., protective effect of sulphapyridine, sodium sulphapyridine, and sulphanilamide in pneumococcus infection types I, II, and III, III, 243.
- Rajagopal, K. R. See Moore, Thomas.
- Rajagopalan, S. See Dey, B. B.
- Rajagopalan, V. S. See Ramani, (Sir) C. V.
- Rajam, J. B., Capron, P. C., and De Hemptinne, M., periods of radio-rhodium and radio-silver obtained by slow neutrons, I, 90.
- Rajewsky, B., radioactive substances and the Schneeberg lung cancer, III, 317. Basic principles and problems of short-wave therapy, III, 529.
- See also Dreblow, W.
- Rake, G., standardisation of antiviral content of immune globulin from placental extract, III, 268.
- and McKee, C. M., action of sulphathiazole and sulphamethylthiazole on *Staph. aureus*, III, 756.
- and Shaffer, M. F., propagation of agent of measles in the fertile hen's egg, III, 172.
- Van Dyke, H. B., and Corwin, W. C., pathological changes following prolonged administration of sulphathiazole and sulphapyridine, III, 921.
- See also McKee, C. M.
- Rakićen, M. L., and Tiffany, E. J., absorption of staphylococcus bacteriophages by enterococci, III, 937.
- Rakićen, N. See Haggard, H. W.
- Rakitin, J. V., and Jarkovaja, L. M., relations between the reaction of medium and the activity of growth-substances, III, 82. Distribution of bios in leaves of *Pueraria* and vine, III, 84.
- Rakoff, A. E., inhibiting effect of quinquevalent arsenicals on *Trichomonas*, III, 65.
- See also Cantarow, A.
- Rakuttis, G., directional distribution and penetrating power of radiation produced from ultra-radiation impacts, I, 188.
- Raleigh, G. J., small air compressor, III, 369.
- Rall, J. See Kizel, A.
- Ralli, E. P., Friedman, G. J., and Sherry, S., vitamin-C requirement of man; studied in 3 adults on controlled diets, III, 145.
- and Rubin, S. H., effect of meat extract on fatty infiltration of liver in depancreatised and duct-ligated dogs, III, 743.
- and Sherry, S., effect of insulin on plasma level and excretion of vitamin-C, III, 732.
- See also Flaum, G., and Rubin, S. H.
- Ralston, A. W., and Bauer, S. T., relation between chain-length and orientation in acylation of phenol, II, 176.
- Selby, W. M., Pool, W. O., and Potts, R. H., b.p. of *n*-alkyl primary amines, I, 388.
- Ralston, E. M. See Scholz, R. O.
- Ram, M. See Chaudhuri, H.
- Ramachandran, B. V. See Damodaran, M.
- Ramage, G. R., and Stowe, W. J. I., structure and synthesis of bæckeol, II, 223.
- See also Bennett, D. J.
- Ramaiah, K. S., Iyer, M. P. V., and Doss, K. S. G., solid-liquid transition of colloidal stearic acid, I, 24.

- Raman, (Sir) C. V., and Nath, N. S. N., quantum theory of X-ray reflexion and scattering. I. Geometric relations, I, 403.
- and Nedungadi, T. M. K., α - β transformation of quartz, I, 152.
- and Nilakantan, P., specular reflexion of X-rays by high-frequency sound waves, I, 286. New X-ray effect, I, 311. Reflexion of X-rays with change of frequency. I. Theoretical. II. Diamond. III. Sodium nitrate. IV. Rock-salt, I, 348, 431.
- and Rajagopalan, V. S., Haidinger's rings in soap bubbles, I, 292. Colours in stratified media. I. Ancient decomposed glass, I, 437.
- Raman, K. S. V. See Varma, P. S.
- Raman, T. K., pellagra in India; study of 25 cases in Vizagapatam, III, 819.
- Ramart-Lucas, (Mme.) P., valency angles and absorption spectra, I, 145.
- Ramasarma, G. B., and Banerjee, B. N., changes in carotene and ascorbic acid content of mangoes during ripening, III, 615.
- Datta, N. C., and Doctor, N. S., ascorbic acid oxidase, III, 532.
- Ramaswamy, R. See Damodaran, M.
- Ramat, A., reduction of solutions of inorganic oxidising compounds by active carbon, I, 266.
- Rambar, A. C., and Denenholz, E. J., arachnodactyly, III, 371.
- Ramberg, E. G. See Morton, G. A.
- Ramberg, L., and Bäcklund, B., monohalogen derivatives of diethyl sulphone, II, 335.
- and Hedlund, I., kinetics of bromination of α -phenylsulphonylpropionic acid in aqueous solution, I, 260.
- Ramirez de Arellano, M., Lawton, A. H., and Dragstedt, C. A., liberation of histamine by trypsin, III, 588.
- See also Dragstedt, C. A.
- Rammelkamp, C. H., and Keefer, C. S., sulphathiazole; effect on *Staph. aureus* *in vitro*, III, 757.
- Ramon, G., combined (active-passive) prophylaxis and treatment of diphtheria and tetanus, III, 869.
- Ramos, A. C. P., antagonism of testosterone propionate and oestradiol, III, 32.
- Rampino, L., and Svirbely, W. J., critical increment of ionic reactions. IV. Influence of dielectric constant and ionic strength, I, 121.
- Ramsay, W. A. See Don, C. S. D.
- Ramsdell, P. A. See Ball, E. G.
- Ramsey, E. M. See Choisser, R. M.
- Ramsey, N. F., jun., rotational magnetic moments of H_2 , D_2 , and HD molecules; rotational radio-frequency spectra of H_2 , D_2 , and HD in magnetic fields, I, 387.
- See also Kellogg, J. M. B.
- Ramsey, R. W., and Street, S. F., isometric length-tension diagram of isolated skeletal muscle fibres of the frog, III, 390.
- Ramsey, W. E., measurements of discharge characteristics of Geiger-Müller counters, I, 306. Period of photoemission in a counter discharge, I, 424.
- See also Korff, S. A., and Swann, W. F. G.
- Rana, K. N. See Hirwe, N. W.
- Ranaudo, C., system $CaCl_2$ - $Ca(NO_3)_2$ - H_2O at 25°, 50°, and 100°, I, 216.
- Rand, G. See Ferree, C. E.
- Randall, C. A., and Parratt, L. G., La satellite lines for elements Mo (42) to Ba (56), I, 276.
- Randall, D. I. See Simons, J. H.
- Randall, H. M. See Fuson, N.
- Randall, L. M., Magath, T. B., and Pansch, F. N., "false" Friedman pregnancy tests, III, 662.
- See also Wilson, R. B.
- Randall, L. O., effect of repeated insulin hypoglycemia on lipin composition of rabbit tissues, III, 498. Effect of testosterone on serum-lipins in schizophrenia, III, 646. Effects of insulin on serum-lipins and choline-esterase in schizophrenia, III, 889.
- Randall, M., Libby, W. F., and Longtin, B., approximate rules for solute activities in dilute solutions of non-electrolytes; generalised form of Bury's rule, I, 214.
- and Longtin, B., calculation of solute activities from activities of the solvent; limiting behaviour of the h and j functions in dilute solutions, I, 214. Freezing points in mixtures of strong electrolytes, I, 249.
- Randall, R. H., and Zener, C., internal friction of aluminium, I, 436.
- Randall, S. S. See Gulland, J. M.
- Randall, W. A., and Reedy, R. J., determining bacterial reduction of nitrates, III, 262.
- Randolph, L. F., card mounts for handling root tips in paraffin method, III, 702.
- and Hand, D. B., relation between carotenoid content and number of genes per cell in diploid and tetraploid maize, III, 943.
- Rane, L., and Subbarow, Y., choline, pantothenic acid, and nicotinic acid as essential growth factors for pneumococcus, III, 771.
- Raney, D. C. See Noller, C. R.
- Raney, R. B., treatment of angina pectoris, III, 98.
- Rang, S. C. See Sun, C. J.
- Ranganadham, S. P., and Qureshi, M., magnetic susceptibilities of solutions of sodium and potassium nitrates, I, 434.
- Ranganathan, S. K., [attempted] synthesis of Wieland's $C_{13}H_{20}O_6$ acid from bile acids, II, 349.
- Rangaswami, S., and Seshadri, T. R., pongamol, new crystalline compound from pongamia oil, II, 256.
- Rangier, M., and De Traverse, P. M., formation of "skatole-red" from normal human urine, III, 224.
- Ranjan, S., and Jha, V. R., effect of ethylene and sulphur dioxide on fruits of *Mangifera indica*, III, 943.
- Rank, B. K. See Gissane, W.
- Ransley, C. E., diffusion of oxygen in copper, I, 19.
- Ransom, H. K. See Collier, F. A.
- Ranson, S. W., Clark, G., and Magoun, H. W., effect of hypothalamic lesions on fever induced by intravenous injection of typhoid-paratyphoid vaccine, III, 111.
- See also Brobeck, J. R., Brookhart, J. M., Dey, F. L., Hetherington, A. W., Magoun, H. W., Pitts, R. F., and Wang, S. C.
- Ranta, L. E. See Helmer, D. E.
- Rantz, L. A., and Keefer, C. S., sulph-anilamide in urinary tract infections, III, 677.
- Ranzi, S., chemical aspects of embryonic development, III, 835.
- Ranzi, S., and Tamini, E., action of sodium thiocyanate on development of frog embryos, III, 87.
- Rao. See also under Rau.
- Rao, A. N., permeability of membranes to calcium salts, I, 23.
- Rao, B. P., intensity of Raman lines in carbon tetrachloride, I, 195.
- Rao, B. S., chemical behaviour of sulphur compounds. I. Hydrolysis of sulphur chloride. II. Disulphur oxide, I, 171.
- and Rao, M. R. A., determination of elementary sulphur dissolved in organic liquids, I, 231.
- Rao, B. S. R., Raman effect in relation to crystal structure. I. Calcite and sodium nitrate, I, 9.
- Rao, C. K. See Srikanthia, C.
- Rao, G. G., photosensitisation by means of solid substances: titanium dioxide; photosensitised oxidation of ammonia in aqueous solution. I, I, 34.
- and Rao, W. V. S., microbiological oxidation of ammonia. II, III, 539.
- Rao, I. R., and Rao, Y. P., equilibrium between H_2O and D_2O , I, 310. Mutual influence of water and heavy water, I, 428.
- Rao, K. R., and Sastry, M. G., structure of the OD bands of heavy water, I, 281. Structure of the 2916 Å. band of OD and mass ratio of the hydrogen isotopes, I, 310. New band of OD at 2963 Å., I, 343.
- Rao, K. S., hysteresis loop in sorption, I, 68. Drift of the hysteresis loop in sorption, I, 158. Rate of sorption in relation to hysteresis, I, 252. Permanence of the hysteresis loop in sorption, I, 252. Elasticity of organo-sols in relation to hysteresis in sorption, I, 252.
- Rao, M. N. See Napier, L. E., and Rao, M. V. R.
- Rao, M. R., sound velocity and intermolecular forces, I, 104. Relation between velocity of sound in liquids and molecular volume, I, 434.
- See also Sibaiya, L.
- Rao, M. R. A., sulphur iodide. I. Formation of sulphur moniodide. II. Rate of decomposition and spectroscopic studies, I, 296. Thionyl iodide. I. Formation of thionyl iodide. II. Rate of decomposition and spectroscopic studies, I, 296.
- See also Rao, B. S.
- Rao, M. S., nutritional requirements of plague bacillus, III, 169, 827. Oxidations by plague bacillus, III, 827.
- and Singh, I., temperature and mechanical response, viscosity, and oxygen consumption of unstriated muscle, III, 389.
- Rao, M. V. R., effect of carotene on peripheral nerve lesions produced by vitamin-A deficiency, III, 818.
- and Rao, M. N., normal haematological standards in monkey (*Macacus sinicus*), III, 838.
- See also Orr, I. M.
- Rao, N. A. N. See Subbaraya, T. S.
- Rao, N. R., electrolytic dissociation in sulphuric acid as studied by Raman effect, I, 440.
- Rao, N. V. S., and Seshadri, T. R., use of mercuric acetate in organic preparations. II. Use as an oxidising agent, II, 151. Organo-mercury compounds derived from quinine and cinchonine, II, 262.

- Rao, N. V. S., Veerabhadrarao, J., and Seshadri, T. R., preparation and reactions of karanjin, II, 49.
- Rao, P. L. N., chemotherapy of bacterial infections. I. Substances related to sulphanilamide; synthesis of *p*-aminobenzylsulphonamide and its derivatives, II, 274.
- See also Guha, P. C.
- Rao, P. N. See Qureshi, M.
- Rao, P. R. S. See Srikantha, C.
- Rao, P. S., Sastri, V. D. N., and Seshadri, T. R., geometrical inversion in the acids derived from the coumarins. VII. Behaviour of acetylcoumaric acids, II, 102.
- Rao, S. R., and Govindarajan, S. R., crystal diamagnetism of tellurium, I, 64.
- Rao, S. S., effect of rotational and oscillational motion of molecules in crystals on their birefringence, I, 63.
- and Qureshi, M., Raman-Krishnan theory of the refractivity of liquids, I, 59.
- See also Chopra, R. N., and Ray, P. N.
- Rao, V., blood-glutathione in experimental infection of guinea-pigs with *Streptococcus viridans*, III, 602.
- Rao, W. V. S. See Rao, G. G.
- Rao, Y. P. See Rao, I. R.
- Rao, Y. V., and Berry, W. E., carbohydrate relations of a single scion variety grafted on Malling rootstocks and IX and XIII, III, 940.
- Raoul, Y. See Meunier, P., and Vermes, M.
- Rapaport, H. G., and Miller, S. H., determination of vitamin-C in children by intradermal injection, III, 146.
- Miller, S. H., and Sicular, A., capillary fragility and ascorbic acid, III, 710.
- See also Lehman, E., and Lerner, H. H.
- Raper, J. R., sexual hormones in *Achlya*. I. Evidence for a hormonal co-ordinating mechanism, III, 451.
- Raper, J. S. See Sprunt, D. H.
- Raper, R. See Clemo, G. R.
- Rapfogel, I., effect of testosterone propionate on skeletal development of a eunuch, III, 848.
- Rapkin, L. See Brachet, J.
- Rapoport, S., phytic acid in avian erythrocytes, III, 877.
- and Guest, G. M., rôle of diphosphoglyceric acid in electrolyte equilibrium of blood cells; pyloric obstruction in dogs, III, 288.
- Rappaport, B. Z. See Feinberg, S. M., Hecht, R., and Necheles, H.
- Rappaport, F., and Reifer, I., determination of lactic acid in blood, III, 382.
- Rappaport, J., effect of leaves and growth-substances on rooting response of cuttings, III, 365.
- Rapport, D. See Canzanelli, A.
- Rapson, W. S., constituents of the leaves of *Leucadendron* species. III. Oxidations of leucodrin derivatives with periodic acid and lead tetra-acetate, II, 352.
- and Shuttleworth, R. G., stable and labile semicarbazones from methyl *n*-amyl ketone, II, 119. Production of polycyclic aromatic types through the cyclodehydration of unsaturated ketones, II, 253.
- Raptopoulos, T., pollen germination tests in cherries, III, 830.
- Rasch, G. See Dybing, O.
- Raschba, E. J., rôle of adenosinetriphosphoric acid in the anaërobic carbohydrate metabolism of muscle, III, 55. Glycogen and phosphorus compounds of muscles of chick embryos; carbohydrate metabolism of muscles of chick embryos, III, 217. Dry content of chick muscles during ontogenetic development, III, 217.
- Rasetti, F., scattering of thermal neutrons by crystals, I, 399.
- See also Amaldi, E., and Lapointe, C.
- Rashevsky, N., plasticity of central nervous systems, III, 20. Mathematical biophysics of growth, III, 87. Mathematical biophysics of organic form. III. Deformation of shell-shaped cellular aggregates, III, 930.
- Raskin, A. I. See Grose, E. F.
- Raskin, N. See Schube, P. G.
- Rasko, J. See Linksz, A.
- Rasmussen, A. T., 8th cranial nerve of man, III, 400.
- and Gardner, W. J., effects of hypophyseal stalk resection on hypophysis and hypothalamus of man, III, 847.
- See also Hemingway, A.
- Rasmussen, E., new energy levels in the silver atom, I, 137. Spark spectrum of silver, I, 275.
- Rasmussen, G. L. See Lassek, A. M.
- Rasmussen, H. W. See Høygaard, A.
- Rasmussen, T. See Hemingway, A.
- Rasmussen, W., preparation of β -glucose, II, 6.
- Rasor, C. A., manganese mineralisation at Tombstone, Arizona, I, 181.
- Ratcliffe, A. W., Mazzini test in sero-diagnosis of syphilis, III, 936.
- Ratcliffe, H. L., spontaneous tumours in two colonies of rats of Wistar Institute, III, 855.
- Ratcliffe, J. A. See Elliott, W. S.
- Rathery, F., Doubrow, S., Ferroir, J., and Tiffeneau, J., fibrinous degradation of collagen in allergic inflammation, III, 339.
- Rathmell, T. K., Heacock, J., and Fry, M. J., superiority of Kolmer antigen reinforced with acetone-insoluble lipins, III, 614.
- Ratish, H. D., and Bullock, J. G. M., bedside test for sulphapyridine, III, 520.
- Davidson, A., and Bullock, J. G. M., absorption and excretion of sulphapyridine and of sodium sulphapyridine in man, III, 860.
- See also Scudi, J. V.
- Ratnagiriswaran, A. N., and Venkatachalam, K., phytochemistry of the bark of *Tabernaemontana coronaria*, II, 198.
- Ratner, A. See Polesitzki, A.
- Ratner, A. P., adsorption of radioactive elements on polar crystals. II. Primary adsorption, I, 68.
- Ratner, B., experimental asthma, III, 387. Food allergy in children, III, 774.
- Ratner, S., Rittenberg, D., Keston, A. S., and Schoenheimer, R., protein metabolism. XIV. Interaction of dietary glycine and body-proteins of rats, III, 821.
- Rittenberg, D., and Schoenheimer, R., stability of hydrogen-carbon linkings in glutamic acid, II, 324. Protein metabolism. XIII. Metabolism and inversion of *d*(+)-leucine, III, 821.
- See also Rittenberg, D., and Schoenheimer, R.
- Ratsch, K. See Grube, G.
- Ratschow, M., local and general metabolism in peripheral disturbances of circulation, III, 477.
- and Steckner, M. L., vascular actions of sex hormones, III, 651.
- Ratsimamanga, R. See Giroud, A.
- Rau, See also under Rao.
- Rau, H., action of detoxin in prophylaxis of puerperal sepsis, III, 61.
- Rau, M. A. G., constitution of sulphur nitride, I, 246.
- Rau, P., auditory perception in insects, with special reference to cockroach, III, 723.
- Rau, R. K., Aiyar, A. A., and Mathew, T. V., premature quintuplets, III, 662.
- Rau, W., intensity variation of the hard component of cosmic ultra-radiation, I, 187.
- See also Regener, E.
- Ran, Y. V. S., and Murty, V. V. S., calcium utilisation from green leafy vegetables, III, 591.
- Ranch, K. See Wieland, H.
- Rauh, L. W. See Lyon, R. A.
- Raunert, M., action of different types of pepper on urinary tract, III, 63.
- Raupenstrauch, O., action of adrenalin in bronchial asthma, III, 306.
- Rausche, C., amputations and arterial hypertension, III, 386.
- Ravdin, J. S., and Johnston, C. G., problems of acute intestinal obstruction, III, 310.
- Vars, H. M., and Goldschmidt, S., non-specificity of suspensions of sodium xanthine in protecting liver against injury by chloroform; probable cause of its action, III, 135.
- See also Riegel, C.
- Ravdin, J. A. See Saslavski, A. I.
- Ravdin, T. S., Stengel, A., and Prushankin, M., hypoproteinemia in surgical patients, III, 286.
- Ravely, M. F. See Raiford, L. C.
- Ravid, J. M., and Chesner, C., fatal case of hæmolytic anemia and nephrotic uræmia following sulphapyridine administration, III, 438.
- Ravin, A., myotonia, III, 297. Determination of thiocyanates in blood with use of permanent standards, III, 840.
- and Waring, J. J., dystrophia myotonia. IV. Its nature and occurrence, III, 713.
- See also Waring, J. J.
- Ravitch, M. M., blood bank at Johns Hopkins Hospital, III, 878.
- Ravitsch, G. B. See Volarovitch, M. P.
- Ravitsch, M. B., and Zacharov, B. A., influence of chemical activation of refractories on the combustion of fire-damp, I, 297.
- Rawdon-Smith, A. F. See Pumphrey, R. J.
- Rawles, M. E., production of robin pigment in White Leghorn feathers by grafts of embryonic robin tissue, III, 3. Pigment-forming potency of early chick blastoderms, III, 700.
- See also Charles, D. R.
- Rawlinson, W. A., crystalline hæmocyanin; physical and chemical constants, III, 840.
- Rawson, A. J. See Starr, I.
- Rawson, R. W., and Salter, W. T., microhistometric assay of thyrotropic hormone in day-old chicks, III, 731.
- See also Nathanson, I. T.
- Ray, A. K. See Quadrat-Khuda, M.
- Ray, B. B., Das, S. R., and Bagchi, N., secondary K-absorption edges of cobalt salts in solid and liquid solutions, I, 312.

- Ray, B. B. See also Mitra, S. K.
- Ray, F. E., and Palinchak, S., asymmetry of the aliphatic nitro-group; resolution of 9-nitro-2-benzoylfluorene, II, 349.
- Ray, G. K. See Basu, N. M.
- Ray, J. D., and Whipple, G. E., effects of heat on phenolised hog-cholera virus, III, 78.
- Ray, J. N., constitution of rottlerin, II, 260.
- Narang, K. S., and Roy, B. S., constitution of rottlerin, II, 139. Mol. wt. of the methyl ether of tetrahydro-rottlerin, II, 260.
- See also Chaudhuri, H., Chopra, N. N., and Jalota, R. S.
- Ray, L. F., and Blank, I. H., effect of ointment bases on skin, III, 938.
- Ray, O. M. See Bodine, J. H.
- Rây, P., and Bagchi, P. N., complex compounds of diguanide with bivalent metals. I. Copper diguanidines, II, 208.
- and Bhattacharya, H. P., complex compounds of diguanide with trivalent metals. VII. Cobaltic trisphenyl-diguanidines, II, 208.
- and Dutt, N. K., complex compounds of diguanide with trivalent metals. VI. Cobaltic trisdiguanidines, II, 208.
- Ray, P. N., and Rao, S. S., chyluria of filarial origin, III, 138.
- Ray, T. B., blood typing and cross-matching with plasma and oxalated erythrocytes, III, 9.
- Ray, T. W., rapid means of obtaining manganese-free iron, I, 328. All-glass adjustable mouse cage, III, 274. Determination of manganese in organic material containing large amounts of calcium and chlorides; determination in the mouse and in milk, III, 780.
- Raybaut, M. See Augier, P.
- Rayleigh, (Lord), active nitrogen. I. Brightness of the afterglow under varied conditions of concentration and temperature. II. Incandescence of metals in active nitrogen, and quantitative estimates of the energy liberated, I, 429.
- Raymond, L. See Gay, L.
- Raymond, W. D. See Harris, L. J.
- Raymond-Hamet, direct and indirect intestinal effects of extract of *Rauwolfia heterophylla*, Roem. and Sch., III, 152. False *Iboga* with pharmacological properties different from those of true *Iboga*, III, 248. Action of formosanine, III, 249. Physiological action of yoxochitil leaves, a Mexican cardiac medicament, III, 333. Effect of echitamine on hypertensive and renal vasoconstrictor properties of adrenaline, III, 439. Two new physiological properties of ibogaine also shared by cocaine, III, 522. Pharmacology of *Ochrosia elliptica*, Labill.; should it be classed as a quinine plant? III, 550. Effect of *Rauwolfia heterophylla*, Roem. and Sch., extracts on cardiac vagus, III, 600. New sympathicolytic drug from French Equatorial Africa, III, 759. Should hydroxytyramine be classed as a true sympathomimetic amine? III, 822.
- and Rothlin, E., action of ibogaine on isolated organs, III, 152. Action of erythrophiline on isolated uterus and gut, III, 152.
- See also Bizet, E.
- Raymond-Johnson, J., effect of quinine-calcium on uterine motility, III, 127.
- Raynaud, A. See Lacassagne, A.
- Rayner, M. C., and Levisohn, I., production of synthetic mycorrhiza in the cultivated cranberry, III, 538.
- Raynor, G. V., lattice spacings of primary solid solutions of silver, cadmium, and indium in magnesium, I, 205.
- See also Hume-Rothery, W.
- Razor, C. T., hysteresis testing with cathode rays, I, 375.
- Razumovski, V. V., electronic structure of organic compounds, I, 198.
- Rea, C. E., functional capacity of undescended testis, III, 648: Effect of extracts of gelding urine on reproductive system of rat, III, 651.
- See also Greavy, C. D.
- Read, B. E. See Pak, C., and Yang, E. F.
- Read, D. R., and Taylor, W., effect of mercuric bromide on the hydrolysis of alkyl bromides in acetone, I, 77. Steric course of the hydrolysis of α -phenylethyl chloride in acetone containing mercuric chloride, I, 296.
- Read, J., Baade and Zwicky's theory of cosmic rays, and the helium content of beryls, I, 91.
- See also Gray, L. H.
- Read, J. H., vacuum stirrer for the laboratory, I, 396.
- Read, T. A., internal friction of single metal crystals, I, 405.
- Reade, T. H. See Crowley, G. P., Davidson, (Miss) A. M. M., Halliday, H. M., and Hutchison, A. C.
- Reardon, A. J., influence of pressure and development on solarised latent photographic image, I, 79.
- Rebay, A. von, and Fettback, H., peroxide of cymene, II, 82.
- Rebbe, O. H. See Hevesy, G. C.
- Rebinder, P. See Mokievski, V.
- Reboul, J. A., existence and characteristics of absorbable ionising radiations emitted by common metals, I, 53. Action of ordinary metals on the photographic plate, I, 226. Theory of biological action of X-rays, III, 258.
- Reeknagel, R. O. See Friedman, M. H. F.
- Redd, J. C. See Anderson, Ernest.
- Reddemann, H., nuclear isomerism of ^{87}Sr , I, 383.
- Redemann, C. E., semimicro-Kjeldahl distillation apparatus, I, 84.
- and Lucas, H. J., derivatives of cyameluric acid; probable structures of melam, melam, and melon, II, 236.
- and Niemann, C., diluturates of physiologically important bases, II, 242.
- Redemann, C. R., and Lucas, H. J., ionisation constants and hydrolytic degradations of cyameluric and hydromelononic acids, II, 110.
- Redfarn, C. A., mesomerism and the uncertainty principle, I, 347.
- Reding, R., dangers of causing cancer by using dyes in food and drugs, III, 422.
- Redisch, W., and Perloff, W. H., medical treatment of hyperthyroidism, III, 407.
- Redish, J. See Greenwald, I.
- Redlich, F. C., metrazol shock treatment; pharmacological and biochemical studies, III, 23.
- Redlich, O., molar volumes of solutes. IV., I, 316.
- Redman, J. L., Agerty, H. A., Barthmaier, O. F., and Fisher, H. R., adrenal neuroblastoma, III, 30.
- Redman, R. See Beck, W. A.
- Redman, W. B., sulphanimide in post-castration peritonitis, III, 758.
- Reece, R. P., lactogen content of female guinea-pig pituitary, III, 207.
- Bartlett, J. W., Hathaway, I. L., and Davis, H. P., hormonal inhibition of lactation, III, 495.
- and Leonard, S. L., further evidence for a mammogenic factor in rat hypophysis, III, 214.
- Reed, C. I. See Bartoli, A.
- Reed, E. A. See Giese, A. C.
- Reed, G. B., Orr, J. H., and Baker, M. C., gas-gangrene toxin production, III, 354.
- Reed, G. E., and Daneey, T. E., compression fractures of vertebral bodies following induced and "idiopathic" convulsions, III, 201.
- Reed, G. J. See Kanner, O.
- Reed, H. S., relation of copper and zinc salts to leaf structure, III, 173.
- Reed, J. F., and Cummings, R. W., determination of zinc in plant materials, III, 831.
- Reedman, E. J., Sampson, W. L., and Unna, K., identity of natural and synthetic vitamin-B₆, III, 514.
- Reedy, R. J. See Randall, W. A.
- Reekie, J., magnetic susceptibilities of cupric salts, I, 153. Scattering of X-radiation by liquid helium II, I, 286.
- Reel, C. See Thornhill, W. A.
- Rees, A. L. G., electronic absorption spectra in solution, I, 285. Electron diffraction and chemistry of molecules in the gaseous state, I, 431.
- See also Bayliss, N. S.
- Rees, M. W. See Chibnall, A. C.
- Rees, W. J. See Dobbins, N. E.
- Rees, W. T. See Cullinane, N. M.
- Reese, A. B., relation of drusen of optic nerve to tuberous sclerosis, III, 804.
- Reese, J. D., Koneff, A. A., and Akimoto, M. B., anterior pituitary changes following adrenalectomy in rat, III, 577.
- Reeves, D. L. See Cass, A. B.
- Reeves, R. E., structure of trimethyl-glucurone, II, 297.
- See also Street, H. R.
- Reeves, R. J. See Renter, E. G.
- Regan, J. F., and Wilder, R. M., hyperthyroidism and diabetes, III, 725.
- Regener, E., and Rau, W., variations of hard components of cosmic rays, I, 142.
- Reggianini, O., photodynamic haemolysis in presence of chlorophyll, III, 8.
- Regidor, P., complications after transfusions with conserved blood, III, 9.
- Régnier, J., and Bazin, S., evidence of adaptation of cells of *Elodea canadensis* to toxins ("potential toxic action") under the effects of hypnotics (chloral, urethane, veronal), III, 693. Adaptation to toxins ("potential toxic action") and cell permeability; plasmolysis of leaf cells of *Elodea canadensis* in toxins, III, 694.
- David, Robert, and Bazin, S., effect of local anaesthetics on plant cells. III., III, 366.
- and Quevaullier, A., effect of local anaesthetics on nerve chronaxie, III, 21. Action of local anaesthetics on the vegetable cell. II. Action of novocaine on the cell volume of *Ascoidea rubescens* (Brefeld); effect of the acid combined with the base, III, 272. Local anaesthesia and physicochemical properties. I., III, 607.

- Régner, J., Quevauviller, A., and Fieyre, A., diffusion of novocaine across an inert membrane (cellophane), III, 334. Diffusion of bases of local anesthetics from the hydrochlorides across an inert membrane (cellophane), III, 334. Local anesthesia and physicochemical properties. II and III, III, 607.
- Regnier, M. T., test for androgen activity, III, 646.
- See also Antoine, G.
- Rehaag, H. See Günther, P. L.
- Rehbinder, P. A. See Shigatsch, K. F.
- Rehm, P., and Winters, J. C., effect of ferric chloride on utilisation of calcium and phosphorus in the animal body, III, 511.
- Rehm, W. S., electrical response of *Phaseolus multiflorus* to electrical currents, III, 545.
- Rehmann, A. See Singh, B.
- Rehn, E., surgical shock in war wounds, III, 194.
- Rehner, J., jun., isolation and identification of fluoranthrene from carbon black, II, 370.
- Reich, H., $\alpha\beta$ -unsaturated aldehydes of the pregnene series, II, 175.
- Sutter, M., and Reichstein, T., constituents of the adrenal cortex and related substances. XXXII. Three stereoisomeric allopregnane-3(β):17:20-triols, II, 128.
- Reich, I. See Markees, S.
- Reichel, H. A., pneumococcal immunity, III, 935.
- Reichel, L., and Ulsperger, E., ellagic tannins, III, 175.
- Reichel, M. See Thannhauser, S. J.
- Reichelt, H. See Bavendamm, W.
- Reiehert, P., and Roth, H., ventiliograph: improved recording ventilometer and its applications, III, 886.
- Reichle, H. S. See Terry, L. L., and Toomey, J. A.
- Reichstein, T., and Euw, J. von, constituents of the adrenal cortex and related substances. XXXI. Diazo-pregesterone, II, 134.
- See also Reich, H., and Shoppee, C. W.
- Reid, A. F., nuclear masses in cervical spinal cord of *Macaca mulatta*, III, 715.
- Reid, (Miss) A. T. See Kharasch, M. S.
- Reid, C. G., control of gastric hyperacidity by magnesium trisilicate, III, 35.
- Reid, D. E. See Thomson, K. J.
- Reid, E. B., preparation of di-*o*-tolylmethyl chloride, II, 10.
- Reid, E. E. See Richardson, E. M.
- Reid, R. D., action of sulphapyridine on pneumococcus, III, 59.
- Reid, W. L., cerebral compression: clinical and experimental study, III, 890.
- Reider, M. J. See Pease, D. C.
- Reider, R. F. See Decker, D. A.
- Reifenstein, E. C. See Reifenstein, E. C., jun.
- Reifenstein, E. C., jun., Reifenstein, E. C., Mignault, J. W., and Raffaele, A. J., picrotoxin in treatment of acute barbiturate poisoning, III, 441.
- Reifer, I., micro-determination of nitrogen by the hypobromite method, using copper as catalyst, II, 318. Micro-determination of adenine, guanine, xanthine, and hypoxanthine in presence of uric acid, II, 320. Nitrate-nitrogen in plant material. I. Micro-determination of nitrate. II. Micro-determination of total nitrogen in presence of nitrate, III, 367.
- See also Rappaport, F.
- Reiff, G. See Maurer, K.
- Reilly, J. See Drumm, P. J., and MacCurtin, T.
- Reilly, W. A., thyrotoxicosis, III, 805.
- Reimann, H. A., infectious diseases, III, 79.
- Reimann, S. P., and Toennies, G., reaction of mouse skin to various reduced and partially oxidised sulphur compounds, III, 528.
- See also Hammett, F. S., Miller, B. J., and Walker, A. C.
- Reimer, L. See Schales, O.
- Reimer, (Miss) M., and Tobin, (Miss) E., addition reactions of unsaturated α -keto-acids. VI, II, 374.
- Reimers, F., determination of methylated *Atropa* alkaloids, II, 320. Determination of iodine in thyroid gland, III, 122.
- Rein, C. R., and Hazay, C. E., rapid heating of serum for Kline tests for syphilis, III, 688.
- and Wise, F., mapharsen in syphilis, III, 253.
- Reinbach, R. See Masing, G.
- Reindell, H., examination of cardiac function of athletes with electrocardiograph and kymograph, III, 190.
- See also Bauer, Hellmut, and Schlomka, G.
- Reinders, W., and De Minier, (Miss) C. H., vapour-liquid equilibria in ternary systems. I. Course of the distillation curves, I, 216.
- Reindl, H. P. See Held, E. F. M. van der.
- Reindollar, W. F., nitrite-nitrogen standards, I, 371.
- Reiner, L., Searle, D. S., and Lang, E. H., hypoglycemic activity of globin insulin, III, 155.
- See also Searle, D. S.
- Reinhardt, M. C., and Warner, S. G., effect of X-rays on genetic constitution of mouse carcinoma, III, 816.
- See also Warner, S. G.
- Reinhardt, F., influence of nutrition on growth of the hind limbs of amphibia, III, 373.
- Reinhardt, W. O., effect of thymectomy in immature rats, III, 724.
- Reinhart, F. E. See Binz, A. H.
- Reinhart, H. L. See Shinowara, G. Y.
- Reinhold, A. See Holtz, P.
- Reinhold, H., and Schmitt, K., conduction of electricity and diffusion in semi-metallic alloys. IV. Electrical conductivity and thermo-electric power of α -silver sulphide, I, 14. Rate of dissociation of sulphur vapour, I, 28.
- Reinhold, J. G., Flippin, H. F., and Schwartz, Leon, pharmacology and toxicology of sulphathiazole in man, III, 437.
- See also Letonoff, T. V.
- Reinié, L. See Levaditi, C.
- Reinwein, H., extrarenal azotemia, III, 381.
- Reis, J., presence of 5-nucleotidase in animal tissues, III, 608.
- Reise, W., and Smyth, G. E., cytology of opossum cortex and cortical evolution, III, 484.
- Reiser, R., effect of phospholipin ingestion on gaseous exchange in man, III, 147. Phosphorus changes during absorption of oil and glucose, III, 822.
- See also Harris, J. S.
- Reiss, M., and Golla, Y. M. L., influence of endocrines on cerebral circulation, III, 709.
- See also MacLeod, L. D.
- Reiss, O., and Boder, E., congenital cranial osteoporosis: its aetiology and significance; study of 800 newborn infants, III, 782.
- Reiss, W., effects of prolonged administration of prolactin on ovaries of immature rats, III, 579.
- Reitemeier, R. F., and Buehrer, T. F., inhibiting action of minute amounts of sodium hexametaphosphate on the precipitation of calcium carbonate from ammoniacal solutions. I. Quantitative studies of the inhibition process. II. Mechanism of the process with special reference to the formation of calcium carbonate crystals, I, 328.
- Reith, J. F., and Dijk, C. P. van, micro-determination of mercury in biological material in [cases of] chronic poisoning, III, 681.
- Reithel, F. J., ten-litre volumetric flask, I, 272.
- See also Manville, I. A.
- Reitler, R., non-specific treatment of allergic diseases, III, 774.
- Reitmann, J., analeptic action of pyridine, III, 926.
- Reitmeier, R. E., Sivertz, V., and Tartar, H. V., properties of monoethanolamine and its aqueous solutions, I, 403.
- See also Sivertz, V., and Tartar, H. V.
- Reitz, O., and Kopp, J., acid and base catalysis in light and heavy water. III. Bromination of acetone, catalysed by undissociated acids and by acetate ions, I, 32.
- Rejtö, A., rôle of perilymph in mechanism of caloric nystagmus, III, 119.
- Remington, J. W., fluid and electrolyte shifts in the normal and adrenalectomised rat after intraperitoneal injection of isotonic sugar solutions, III, 497.
- See also Gaunt, R.
- Remington, T. W. See Collings, W. D.
- Remiz, E. K., and Frost, A. V., catalytic hydration of olefines. III. Sulphuric acid as a catalyst for continuous preparation of *tert*-butyl alcohol from isobutylene, II, 265.
- Remlinger, P., and Bailly, J., effect of slow and rapid desiccation on the viruses of rabies and of Aujeszky's disease, III, 544. Effect of moisture on activity of material containing rabies virus, III, 690.
- Remotti, E., vascular hormone, III, 16. Existence of vascular hormone and its relationship to neoplasm, III, 425.
- Remp, D. G., Rosen, S. R., Ziegler, J. B., and Cameron, D. E., ascorbic acid levels in patients suffering from senile psychoses, III, 915.
- Remy, H. See Jorissen, W. P.
- Rémy, R. H. See Péronnet, M.
- Renard, M., syntheses and properties of compounds of the type $\text{CH}_2[\text{CH}(\text{COR})_2]_2$ ($\text{R}=\text{OEt}$ or Me), II, 153.
- Rendel, G., observations on the Donaggio reaction, III, 605.
- Rendel, J. M., inheritance of yellow bill colour in ducks, III, 836.
- Reneger, C. A. See Matthews, E. D.
- Rennie, T. A. C., and Fowler, J. B., follow-up study of 500 patients with schizophrenia admitted to hospital from 1913 to 1923, III, 300.
- Renquist, M. L. See Moore, G. E.
- Rensch, O., excitability of inflamed skeletal muscle, III, 296.
- Rense, W. A. See Paul, F. W.

- Renshaw, B., Forbes, A., and Morison, B. R., activity of isocortex and hippocampus: electrical studies with micro-electrodes, III, 485.
- Renshaw, R. J. F. See Drake, M. E.
- Renshaw, R. R., and Friedman, H. L., preparation of *py*-aminoquinolines and derivatives, II, 106.
- Friedman, H. L., and Gajewski, F. J., coupling reactions of aminoquinolines with benzenediazonium chloride; orientation in the quinoline ring, II, 106.
- Renton, R. M. See Fraser, E. A.
- Renz, J. See Stoll, A., and Wieland, H.
- Renzetti, N. A., electric quadrupole moments of ^{69}Ga and ^{71}Ga ; atomic beam study of the hyperfine structures of $^{2}\text{P}_{1/2}$ and $^{2}\text{P}_{3/2}$ states of ^{69}Ga and ^{71}Ga , I, 276.
- Repetto, O. M., vitamin-C content of edible Argentine vegetables, III, 145.
- Reschia, C. See Gambigliani-Zoccoli, A.
- Reschke, J. See Schenck, M.
- Resta, L. S. See Rojas, P.
- Restaino, S., system $\text{NH}_4\text{Cl}-\text{NaCl}-\text{H}_2\text{O}$ at 25°, 50°, and 100°, I, 216.
- Restelli de Labriola, E., and Deulofeu, V., action of pyridine-acetic anhydride reagent on *d*- α -glucoheptose-, *d*-glucosamine-, and *l*-fucose-oximes, II, 298.
- Retzlaff, L. See Weicker, B.
- Reurink, J., neuroblastoma of adrenal gland with intrathoracic metastases, III, 895.
- Reusch, E., effect of skin extracts on blood-sugar, III, 12.
- Reuss, A., breast feeding of infants, III, 230.
- Reussi, C. See Mascheroni, H. A.
- Reuszer, H. W. See Barr, C. G.
- Reuter, E. G., and Reeves, R. J., X-ray pelvimetry, III, 463.
- Reuter, F., continuous liquid extractor, I, 42. See also Bolliger, A.
- Reuter, K. See Brand, K.
- Reveno, W. S., fasting exercise blood-sugar curve: guide for therapy in diabetes mellitus, III, 883.
- Revukas, A. J. See Whitmore, W. F.
- Rey, S. See Romano, N.
- Reymont, A., study of liver function in experimental peptic ulcer, III, 500.
- Reynolds, A. K., pharmacological actions of curarine, III, 681.
- Reynolds, D. D., and Evans, W. L., synthesis of oligosaccharides in the mannose series, II, 68.
- Reynolds, E. S., relations of plants to minute doses of inhibitive substances, III, 547.
- Reynolds, H., and Werkman, C. H., carbonic activity of *Escherichia coli*, III, 452.
- Reynolds, H. H. See Hauser, E. A.
- Reynolds, L., Corrigan, K. E., and Hayden, H. S., X-ray diffraction and polarized light studies of fibre structure of dura and of meningioma, III, 113. See also Macy, J. G.
- Reynolds, L. M. See Stewart, G. W.
- Reynolds, P. W. See Hume-Rothery, W.
- Reynolds, S. R. M., and Foster, F. I., peripheral vascular action of oestrogen in human male, III, 130. Acetylcholine-equivalent content of uterus and placenta in rabbits, III, 307. Physical conditions in uterus governing duration of pregnancy, III, 580. Relative cholinergic effects of selected oestrogens, III, 652. Peripheral vascular action of oestrogen, observed in the ear of the rabbit, III, 653.
- Reznikoff, L. See Levine, H.
- Reznikoff, P., polycythæmia, III, 276.
- Rhamy, B. W., development of chemical preservation of complement, especially Rhamy's sodium acetate method, III, 559.
- Rheinhold, J., Valentine, E. H., and Ferguson, L. K., effect of storage on prothrombin content of citrated blood, III, 706.
- Rhett, W. M., prophylaxis and treatment of poliomyelitis with neoprontosil, III, 599.
- Rhines, F. N., metallographic study of internal oxidation in α -solid solutions of copper, I, 290. and Wells, C., influence of microstructure on process of diffusion in solid metals, I, 19.
- Rhoads, C. P., aplastic anæmia, III, 276. See also Dobriner, K., Erf, L. A., and Kensler, C. J.
- Rhoads, J. E., relation of vitamin-K to hæmorrhagic tendency in obstructive jaundice; cerophyl as source of vitamin-K, III, 185. and Fliegelman, M. T., clinical use of 2-methyl-1:4-naphthaquinone, III, 378. See also Warren, R.
- Rhoads, P. S., and Airemow, M. L., sulph-anilamide in sore throat due to hæmolytic streptococci, III, 599.
- Rhodes, F. C. See Philpot, (Miss) J. P.
- Rhodes, J. E. W., precipitated basic magnesium carbonate, I, 170.
- Ri, H. See Kaku, T.
- Ri, K., effect of diet on formation of acet-aldehyde in liver. I. Dogs on normal, fasting diet. II. Starvation, protein-fat feeding, and carbon tetrachloride poisoning in dogs, III, 665, 908.
- Ri, Taikei, and Eyring, H., calculation of dipole moments from rates of nitration of substituted benzenes and its significance for organic chemistry, I, 347.
- Ri, Togaku, action of Formosan snake venoms on carbohydrate metabolism. I. Influence of acute poisoning. II. Chronic poisoning with snake venom on blood sugar of rabbits. III. Effect of blood-sugar and liver- and muscle-glycogen of rabbits. IV. Effect on adrenaline content of adrenals and blood of rabbits, III, 66, 156.
- Ribin, V. A., colchicine-induced tetraploidy in *Helianthus annuus*, L., III, 83. Tetraploid plants of *Vicia faba* produced by treatment with colchicine, III, 272.
- Ribner, H. S., Schremp's theory of cosmic ray fine structure, I, 54. See also Schremp, E. J.
- Ricca, R. A. See Lucké, B.
- Ricca, V., and Della Corte, M., photoelectric effect in incandescent metals, I, 88.
- Ricchiuti, J. F., jun. See Clarke, J. A.
- Ricci, J. E., and Davis, T. W., empirical relation between solubility of slightly soluble electrolytes and dielectric constant of the solvent, I, 207. See also Burton, M., Davis, T. W., Hill, A. E., Naidich, S., and Soth, G. C.
- Rice, E. E., simplified procedure for isolation of lysine from protein hydrolysates, II, 30. See also Rose, W. C.
- Rice, F. O., and Walters, W. D., thermal decomposition of diacetyl, I, 77.
- Rice, F. O., Walters, W. D., and Ruoff, P. M., reactions of free radicals with organic compounds containing atoms with unshared electron pairs, II, 150.
- Rice, J. C., and Brazda, F. G., survival of the fasting fresh-water oligochaete, *Tubifex*, in the laboratory, III, 852. See also Brazda, F. G.
- Rice, J. L. See Baehr, G., and Hyman, H. T.
- Rice, O. K., fusion process in argon, I, 17. Role of heat conduction in thermal gaseous explosions, I, 442.
- Rice, W. W. See Kistiakowsky, G. B.
- Riceman, D. S., Donald, C. M., and Evans, S. T., copper deficiency in plants in S. Australia, III, 776.
- Rich, A. R., and Hamilton, J. D., experimental production of cirrhosis of liver by deficient diet, III, 743. See also Follis, R. H., jun.
- Richard, F. See Briner, E.
- Richards, C. E. See Morgnulis, S.
- Richards, D. W., jun., Barach, A. L., and Cromwell, H. A., use of vaporised bronchodilator solutions in asthma and emphysema, III, 294. See also Darlin, R. C.
- Richards, F. J., and Shih, S. H., physiology of plant nutrition. X. Water content of barley leaves determined by the interaction of potassium with other nutrient elements, III, 361.
- Richards, F. L. See Drummond, D. H.
- Richards, H. T., and Hudspeth, E., photographic plate spectrum of *d-d* neutrons, I, 400.
- Richards, L. See Young, W. G.
- Richards, M. B. See Irving, J. T.
- Richards, M. M., and Hellerman, L., activation of enzymes. VI. Reversible inactivation of liver-arginase, III, 765.
- Richards, O. W., yeast growth: test organism for X-rays, III, 825. Colchicine stimulation of yeast growth fails to reveal mitosis, III, 932.
- Richards, R. A. See Butcher, E. O.
- Richards, R. B., mechanism of Wurtz reaction, I, 415.
- Richards, S. H. See Hickling, A.
- Richards, S. J., survey of the ultra-violet solar radiation at Johannesburg, I, 428.
- Richardson, A. P., production of anæmia in white mice by sulphanilamide, sulphapyridine, and diaminodiphenylsulphone, III, 152. Congo-red: absorption, distribution, and sojourn in blood; hæmatologic actions, III, 285. Cyanosis in chickens and mice induced by sulphanilamide, III, 331. and Dillon, J. R., jun., Congo-red: toxicity and systemic actions, III, 338.
- Richardson, D. T., assessment of physical fitness, III, 340.
- Richardson, E. G., propagation of super-sonics in liquids, I, 368.
- Richardson, E. L. See Trimble, H. M.
- Richardson, E. M., and Reid, E. E., *aw*-di-*p*-hydroxyphenylalkanes, II, 167.
- Richardson, F. D. S. See Lees, G. M.
- Richardson, F. L., cæcotomy of chicks and effect on their growth and infectability with intestinal flagellates, III, 39.
- Richardson, G. M. See Morton, A. A.
- Richardson, G. O., adenomatosis of human lung, III, 913.
- Richardson, J. E., and Mayfield, H. L., amount of ascorbic acid excreted at each urination during 24-hour periods, III, 594.

- Richardson, J. F. See Snyder, H. R.
- Richardson, J. R. *Reginald*. See Curtis, B. R.
- Richardson, John R., Holmes, E. M., and Mueller, Werner, progress in otolaryngology; anatomy and physiology of ear, III, 26.
- See also Manville, I. A.
- Richardson, J. S. See Goadby, H. K.
- Richardson, J. W., and Parks, G. S., thermal data on organic compounds. XIX. Modern combustion data for non-volatile compounds containing carbon, hydrogen, and oxygen, I, 118.
- Richardson, K. C., effect of diabetogenic anterior pituitary extracts on islets of Langerhans in dogs, III, 209.
- Richardson, L. R., and Hogan, A. G., adequacy of a milk diet for rats, III, 510. Relation of pantothenic acid to dermatitis of the rat, III, 915.
- See also Hogan, A. G.
- Richardson, N. E. G. See Drummond, J. C.
- Richardson, (Sir) O. See Drinkwater, J. W.
- Richardson, R., simplified method for calculating diabetic diets, III, 327. Relation of tissue-glycogen and blood chemistry to bacterial dissemination, antibody formation, and survival after infection in diabetes, III, 413.
- Richardson, R. S., intensity changes in bright chromospheric disturbances, I, 88.
- Richert, D., Thayer, S. A., McKee, R. W., Binkley, S. B., and Doisy, E. A., bio-assay of water-soluble anti-haemorrhagic compounds by intravenous administration, III, 916.
- See also Marlow, H. W.
- Richlin, I. See Kharasch, M. S.
- Richmond, G. M., serendibite and associated minerals from the New City Quarry, Riverside, California, I, 182.
- Richmond, J. L. See Davis, T. L.
- Richner, H. See Vogt, A.
- Richou, R. See Boivin, A.
- Richter, A. F., elementary micro-analysis, II, 30.
- See also Fink, F.
- Richter, C. P., and Barelare, B., jun., carbohydrate, fat, and protein appetite of vitamin-B-deficient rats, III, 144.
- and Campbell, K. H., sucrose taste thresholds of rats and humans, III, 493. Alcohol taste thresholds and concentrations of solution preferred by rats, III, 805.
- and Eckert, J. F., mineral appetite of parathyroidectomised rats, III, 304.
- and MacLean, A., salt threshold in man, III, 206.
- and Schmidt, E. C. H., jun., changes produced in rats by pancreatectomy, III, 124.
- See also Langworthy, O. R., and Wilkins, L.
- Richter, D., inactivation of adrenaline *in vivo* in man, III, 728. Adrenaline ester, III, 895.
- and Tingey, A. H., amine oxidase and adrenaline, III, 211.
- See also Lee, M.
- Richter, G. See Vollmer, H.
- Richter, H., action of oxidising agents (potassium permanganate, benzoyl peroxide, and benzoquinone), veratrine, and mistletoe on tone of frog's heart, III, 679.
- See also Jarisch, A.
- Richter, O., and Ivy, A. C., presence of anti-pernicious anaemia factor in extract of foetal bovine livers, III, 182.
- Richter, R. See Brock, N.
- Richtmeyer, R. D., electromagnetic self-energy of mesotrons, I, 190.
- Richtmyer, F. K., and Parratt, L. G., determination of widths of energy states: argon K absorption limit, I, 335.
- Richtmyer, N. K., and Hudson, C. S., ring-structure of D-altrosan, II, 205.
- Richtzenhain, H., lignin. XXVII. Fission of ether linkings with hydrogen sulphite and thiolacetic acid; models for the chemistry of lignin, II, 138.
- and Hofe, C. von, lignin. XXVI. Stilbene derivative from sulphite liquor, II, 100.
- See also Freudenberg, K.
- Rickard, E. R. See Horsfall, F. L., jun.
- Rickert, H. F. See Alder, K.
- Ricketts, H. T., and Wilder, R. M., amorphous and crystalline insulin, III, 209.
- Riddell, W. H. See Kramer, M. M.
- Riddick, J. A., heat control units, I, 301.
- Riddle, M. C., pernicious anaemia: erythrocyte response to treatment, III, 787.
- See also Osgood, E. E.
- Riddle, O., and Johnson, M. W., sex reversal in dove hybrids from a sub-family cross, III, 624.
- and Smith, G. C., respiratory metabolism of pigeons after adrenalectomy and its increase by prolactin, III, 846.
- See also Bates, R. W., Johnson, M. W., and Miller, R. A.
- Rideal, E. K., electrical double layer, I, 110.
- and Schulman, J. H., reactions with monolayers and their biological analogies, III, 69.
- See also Dean, R. B., Eley, D. D., Steiner, H., and Twigg, G. H.
- Rider, D. L., results of feeding wheat-germ oil prepared by ether extraction, III, 516.
- Ridgeway, R. R. See Cuthbertson, W. F. J.
- Ridout, J. H. See Barrett, H. M., and Best, C. H.
- Riebeling, C., determination of ether-soluble substances in cerebrospinal fluid, III, 202.
- Riebsomer, J. L., Burkett, H., Hodgson, T., and Senour, F., azetidine derivatives. I. 3-Hydroxy-2:4-diketo-3-arylazetidines, II, 103.
- Rieche, A., and Meister, R., alkyl peroxides. XII. Ethylidene diperoxide. XIII. Tripropylidene triperoxide, II, 62.
- Riechert, W., action of acetyl- and benzoyl-aneurin on cat's blood pressure, III, 600.
- and Hübschmann, H., action of aneurin esters on leech, rat's gut, and blood pressure of cat, III, 600.
- Rieckmann, P., absorption of ultrasonic waves in mercury, I, 104.
- Riedel, H., bactericidal action and other properties of azorhodan (a thiocyanodiaminoazobenzene derivative), III, 600. Chemical properties of azorhodan, III, 678.
- Riedel, L., determination of thermal properties of trifluorotrichloroethane [Freon 113], I, 16. Determination of specific heat of liquid dichlorodifluoromethane, I, 65. Vapour pressure measurements on monofluorotrichloromethane, I, 154.
- Riedel, P. A. See Whittemore, W. L.
- Rieder, F. See Brill, R.
- Riedl, F., special form of lens regeneration in secondary cataract in a family with hereditary perinuclear cataract, III, 573.
- Riedl, L., unusual changes in the sperm in chronic carbon monoxide poisoning, III, 865.
- Riegel, B., Smith, P. G., and Schweitzer, C. E., oxidation-reduction potential of vitamin-K₁, I, 258.
- Riegel, C., Calder, D. C., and Ravdin, I. S., changes in cholesterol content of hepatic bile subjected to gall-bladder activity, III, 851.
- Ravdin, I. S., and Prushankin, M., effect of sodium dehydrocholate (decholin) on bile salts, chloride, and cholesterol of bile in dogs, III, 41.
- Riegert, A., colorimetric micro-determination of creatinine in plasma and serum, III, 286. Application of adsorption and elution to the isolation of urinary glyoxalines, III, 369.
- Riehl, (Miss) D., and Johnson, T. B., pyrimidines; synthesis from uracil of pyrimidines related structurally to thiamine, II, 109.
- Riehl, N., new results with luminescent substances and their use, I, 272.
- and Schön, M., luminescence mechanism of crystalline phosphors, I, 196.
- Riehn, K., chemotherapy of pneumonia, III, 244.
- Riemenschneider, R. W. See Wheeler, D. H.
- Rienacker, G., and Bommer, E. A., catalytic investigations on alloys. V. Catalytic hydrogenation of ethylene on copper-nickel alloys, I, 33.
- Riesen, A. H., delayed reward in discrimination learning in chimpanzees, III, 620.
- Riesenfeld, E. H., separation of isotopes, I, 274.
- Riess, O., and Strauch, W., alteration of the mineral salt content of the intestinal mucous membrane after oral administration of mineral waters (Liesegang's method of incineration), III, 241.
- Riehmman, J. See Perret, A.
- Rietschel, H., Horster, H., and Misslbeck, H., prophylaxis of rickets, III, 858.
- and Schick, H., 160 days of vitamin-C free diet in man, III, 858.
- Rietz, E., laboratory still, I, 236.
- See also Glattfeld, J. W. E.
- Rietz, J. See Marquort, W.
- Riewe, K. H., summation of state, degree of dissociation, and degree of ionisation of gases, I, 17.
- See also Möglic, F.
- Rife, C. S. See Coller, F. A.
- Rigal, M. See Paris, R.
- Rigdon, R. H., capillary permeability in skin of rabbit, III, 101. Haemolysis produced by staphylococcus colonies and toxin on agar media containing various animal bloods, III, 169. Effects of intraperitoneal injections of staphylococcus antitoxin on subcutaneous staphylococcal infection in mice, III, 265. Staphylococcus toxin, III, 454.
- and Freeman, P. R., effects of sulphapyridine on staphylococci and staphylococcus toxin, III, 919.
- See also Cressman, R. D.
- Riggio, E. See Fichera, G.
- Riggs, D. S., and Man, E. B., micro-determination of iodine by permanganate, acid-ashing method. I. Values in blood of normal subjects, III, 780.
- Riggs, H. E. See Boles, R. S.
- Rihn, A. E., and Dekay, H. G., glucosides of common milkweed, *Asclepias cornuti*, III, 461.

- Rijlant, P. See Gillard, G.
- Rijnberk, G. van, variability of segmental innervation of rectus abdominis in dog, III, 551.
- and Bouman, H. D., muscle sounds of single twitch, III, 480.
- and Gate, J. ten, abdominal reflexes in dogs, III, 392. Cremasteric reflex in dogs, III, 392. Reflexes of dog, III, 569. Tail reflexes in dogs, III, 569.
- Riker, A. J. See Locke, S. B.
- Riley, D., Patterson analysis derived from the cyclol C₂ skeleton, I, 387.
- See also Crowfoot, (Miss) D.
- Riley, G. M. See Witschi, E.
- Rimington, C., porphyrinuric action of 2-*p*-aminobenzenesulphonamidopyridine (M. & B. 693); comparison with sulphanilamide, III, 224. Porphyrins and their relation to metabolism of blood pigments, III, 296. Seromucoid and bound carbohydrate of serum-proteins, III, 705.
- and Ende, M. van den, globoglycoid, crystalbumin, seroglycoid, and seromucoid fractions of normal horse serum, III, 705.
- and Goldblatt, M. W., urinary excretion of porphyrins in chemical workers, III, 313.
- See also Chandler, F. G.
- Riml, O., blood changes in adrenal insufficiency, III, 643.
- Rin, K., changes in physiological condition of the new-born infant. IX. Non-protein-nitrogen and its constituents, III, 917.
- Rinderknecht, H., and Williams, P. C., separation of follicle-stimulating fraction from pituitary gonadotropin, III, 494.
- Rinehart, J. S., temperature-dependence of Young's modulus of β -brass single crystals, I, 407.
- Rinehart, R. E. See West, E. S.
- Rinfret, A., obtaining group A haemolytic streptococci sensitive to reaction of capsular swelling, III, 771.
- Ringk, W. F. See Goldberg, S. D.
- Rinkel, M. See Loman, J., and Myerson, A.
- Rinkhart, J. F. See Greenberg, L. D.
- Rintelen, W., premature synostosis in skull sutures, III, 371.
- Rintschino, M. See Vonwiller, P.
- Rioch, D. McK. See Armstrong, S. H.
- Ripley, H. S., Shorr, E., and Papanicolaou, G. N., effect of treatment of depression in menopause with oestrogenic hormone, III, 660.
- Rippel, A., water as habitat of micro-organisms, III, 352.
- Behr, G., and Nabel, K. [with Lehmann, B.], production of protein by bacteria. II. Effects of iron and phosphate, III, 451.
- [with Lehmann, B.], production of protein by bacteria. I. Preparation of a synthetic medium, III, 451.
- Rippel, K., the cell-division hormone in seeds and seedlings of *Pirus malus*, *Prunus domestica*, and *Prunus avium*, III, 943.
- Risch, W., weight of thyroid gland in Switzerland, III, 122.
- Riseman, J. E. F., and Brown, M. G., effect of oxygen on exercise tolerance of patients with angina pectoris, III, 292.
- Rishkov, V. L., Vorobeva, M. N., and Gromiko, E. P., biochemical changes in oats affected with virus disease, III, 78.
- Risk, R. See Smith, S.
- Risolo, A. See Slavieh, E.
- Riss, I. G., virtual entropy of silicon fluoride calculated from the molecular constants, I, 154. Viscosity of solutions of sodium chromate and of technical chromate solutions, I, 290.
- Rissel, E., urinary bilirubin excretion in jaundice, III, 223.
- See also Brugsch, T.
- Risser, J. R. See Henderson, W. J.
- Rist, N., Block, F., and Hamon, V., inhibiting effect of sulphanilamide and of *p*-diaminodiphenyl sulphone on multiplication of avian *B. tuberculosis* *in vitro* and *in vivo*, III, 438.
- and Thibault, P., chemotherapy of experimental infection of mice with Flexner's dysentery bacillus, III, 688.
- Ristić, S., safety valve to prevent return of water in water pumps, I, 177.
- Ritchie, E. See Gillis, R., and Lions, F.
- Ritchie, M., and Smith, R. L., photo-expansion of chlorine: recombination of chlorine atoms, I, 262.
- See also Taylor, D., and Wyllie, D.
- Ritser, K., determination of oocarboxylase in blood and tissues by thiochrome method, III, 533.
- Rittenberg, D., and Foster, G. L., quantitative analysis by isotope dilution, with application to the determination of amino-acids and fatty acids, II, 264.
- Ratner, S., and Hoberman, H. D., catalytic hydrogenation with deuterium, I, 416.
- See also Clutton, R. F., Du Vigneaud, V., Graff, S., Ratner, S., Schoenheimer, R., Vickery, H. B., and Waelsch, H.
- Ritter, C., toxicity of basic fuchsin for bacteria, III, 451.
- Ritter, G. See Benrath, A.
- Ritter, G. J. See Mitchell, R. L.
- Ritter, H., fasting blood-sugar values in children with normal metabolism, III, 883.
- Ritter, J. R., and Bogert, V., acid-polymerised dipinene. II. Identification of the dehydrogenate, II, 311.
- and Sharefkin, J. G., acid-polymerised dipinene. I. Dehydrogenation, II, 311.
- Ritter, W., histology of the hypothalamus in ordinary obesity and syndromes of Morgagni, Günther, and Cushing, III, 402.
- Ritz, N. D. See Samuels, L. T.
- Riven, S. S. See Minot, A. S.
- Rivera, V. See Sagastume, C. A.
- Rivers, T. M., Ward, S. M., and Baird, R. D., amount and duration of immunity induced by intradermal inoculation of cultured vaccine virus, III, 268.
- See also Smadel, J. E.
- Rivière, A., dolomitisation of calcareous sediments, I, 46. Mechanism of dolomitisation of calcareous sediments, I, 84.
- Riwoldt, K. H., acromegaly and nephritis, III, 641.
- Rizzotti, G., and Sivieri, F., synergism of cerebral action of camphor, sodium santonate, and cocaine by β -phenylisopropylamine, III, 442.
- Rjabinskaja, A. M., influence of sodium fluoride, sodium maleate, glutamic acid, and glyceraldehyde on muscular activity, III, 20.
- Rjabtschikov, D. I., and Knjasheva, G. V., determination of gold by potentiometric titration, I, 233.
- and Silnitschenko, V. G., potentiometric titration of iron, I, 270.
- Roach, F. E. See Struve, O.
- Roach, W. A., flame method of spectrochemical analysis, I, 130.
- Roaf, D., coincidence counter for low-energy β -particles, I, 134. Energies of β -particles from uranium-X₂, I, 140.
- See also Collie, C. H.
- Roaf, H. E., potential difference accompanying wave of activity [in tissue], III, 888. Triphasic electrical changes [in skeletal muscle], III, 888.
- Robb, G. P., and Steinberg, I., visualisation of chambers of the heart and thoracic blood vessels in pulmonary heart disease, III, 383.
- Robb, J. P., fatal case of agranulocytosis from sulphanilamide, III, 678.
- Robb, W. D. See Emerson, W. S.
- Robbers, H., and Westenhoeffer, O., action of lactoflavin on inhibition of carbohydrate absorption produced by phloridzin, III, 416.
- Robbins, B. H., and Baxter, J. H., jun., cyclopropane. VIII. Effect of pre-medication with morphine or amylal on heart rate, rhythm, and blood pressure in dogs under cyclopropane anaesthesia, III, 334.
- Robbins, G. B., and Upson, F. W., fully acetylated sugar acids and their derivatives, II, 266.
- Robbins, R. C. See Miller, C. D., and Todhunter, E. N.
- Robbins, W. J., growth-substance in agar, III, 450.
- and Kavanagh, F., intermediates of vitamin-B₁ and growth of *Torula*, III, 932.
- and Schmidt, M. B., biotin, III, 78. [Growth of] excised tomato roots, III, 174.
- Roberts, A. See Hertz, S.
- Roberts, E., Quisenberry, J. H., and Thomas, L. C., hereditary hypotrichosis in rat, III, 554.
- Roberts, E. A. H., fermentation process in tea manufacture. V. Role of cytochrome oxidase. VI. Effect of dilution on rate and extent of oxidations in fermenting tea-lead suspensions, III, 532. Nature of the cyanide-stable portion of cellular respiration, III, 916.
- See also Lamb, J.
- Roberts, G. E. See Williams, E. J.
- Roberts, J. A. F., surnames, intelligence, and fertility, III, 739.
- Roberts, J. D. See Crowell, W. R.
- Roberts, J. I. See Anderson, T. F.
- Roberts, J. K., structure and formation of immobile adsorbed film; adsorption of oxygen on tungsten, I, 158. Monolayers on solids, I, 356. Theory of adsorption on square lattices, I, 438.
- See also Morrison, J. L.
- Roberts, J. L., White, W. C., and Ojerholm, E., influence of osmotic pressure on sporulation by *Bacillus subtilis*, III, 933.
- Roberts, L. J. See Steininger, G.
- Roberts, R. B., and Heydenburg, N. P., formation of ⁷Be, I, 383.
- See also Flexner, L. B., and Heydenburg, N. P.
- Roberts, R. D., and Kuper, J. B. H., uranium and atomic power, I, 53.
- Roberts, R. G. See Miller, C. O.
- Roberts, R. H., and Shutt, W. J., anodic behaviour of chromium, I, 75.
- Roberts, R. M. See Conn, J. B.

- Roberts, R. W., and Adams, S. F., magnetic rotatory dispersion and refractivity of aqueous solutions of nickel sulphate throughout the range 5780 Å. to 2482 Å.; magnetic rotation in the 3950 Å. absorption band, I, 59.
- Robertson, A. See McGookin, A.
- Robertson, D. E., appendix vermiformis duplex, III, 834.
- Robertson, D. W., Lute, A. M., and Gardner, R., effect of relative humidity on viability, moisture content, and respiration of wheat, oats, and barley seed in storage, III, 360.
- Robertson, E. C. See Ham, A. W.
- Robertson, E. G. See Burnet, F. M.
- Robertson, E. M. See Macpherson, A. I. S.
- Robertson, G. G., ovarian transplantations in house mouse, III, 739.
- Robertson, G. J., and Whitehead, W., Walden inversion in the altrose series, II, 205.
- Robertson, G. R., and Evans, R. A., formation of chloroaniline during reduction of nitrobenzene, II, 162.
- Robertson, H. F., and Fanst, F. B., theophylline with isopropanolamine in heart disease, III, 924.
- See also Klauder, J. V.
- Robertson, J. See Lapsley, R. W.
- Robertson, J. M., formation of intermolecular hydrogen bonds; X-ray evidence, I, 404.
- and Woodward, (Miss) L., X-ray study of the phthalocyanines. IV. Direct quantitative analysis of the platinum compound, I, 151.
- Robertson, R. N., salt accumulation and plant respiration, III, 775.
- Robertson, W. M. F., and Colquhoun, D. B., Meinicke clarification reaction: factors influencing non-specific zone phenomena, III, 542.
- See also Thomas, J. C.
- Robertson, W. van B., Ropes, M. W., and Bauer, W., mucinase, a bacterial enzyme which hydrolyses synovial fluid mucin and other mucins, III, 448.
- Robeson, C. D. See Baxter, J. G.
- Robey, R. F., rule of co-ordination valency, I, 99.
- Robillard, E. See Binet, L.
- Robinson, M., Hamilton, W. F., Woodbury, R. A., and Volpito, P. P., accuracy of clinical determinations of blood pressure in children; values under normal and abnormal conditions, III, 100.
- See also Bohning, A., Burpee, C. M., and Mettler, F. A.
- Robinson, A. M. See Cook, J. W.
- Robinson, B. B. See Matchett, J. R.
- Robinson, D., muscle-haemoglobin of seals as an oxygen store in diving, III, 196.
- Robinson, E. C., study of 240 breast-fed and artificially fed infants in St. Louis area, III, 672, 752.
- Robinson, F. A., removal of adhered rubber stoppers, I, 302.
- Robinson, F. H. See Shorr, E.
- Robinson, G. W., and Shelton, P., dextrose tolerance curves in nervous and mental patients, III, 860.
- Robinson, H. See Antopol, W., and Molitor, H.
- Robinson, H. J. See Lockwood, J. S., and Scudi, J. V.
- Robinson, H. M., and Bliss, H., analytical calculations of thermodynamic properties, I, 202.
- Robinson, H. R. See Clews, C. J. B., and Mayo, R. L.
- Robinson, H. W., and Hogden, C. G., biuret reaction in determination of serum-proteins. I. Production of stable colour related quantitatively to the protein concentration. II. Measurements made by Duboscq colorimeter, III, 882.
- Robinson, J. V. See Clark, G. L.
- Robinson, J. W., jun. See Fanson, R. C.
- Robinson, K. W., and Courtice, R., factors affecting the vitamin-C content of fruit and vegetables, III, 915.
- See also Leggett, E. L.
- Robinson, L. J., radiologic gastrointestinal studies in epilepsy, III, 24. Acute poisoning with dilantin sodium, III, 926.
- and Osgood, R., phenobarbital and dilantin sodium in epilepsy, III, 602.
- Robinson, (Sir) R., speculation regarding the ring structure of sterols and related substances, II, 217. Chemotherapy of tuberculosis, III, 542.
- and Thompson, J. M. C., synthesis of substances related to the sterols. XXVIII, II, 16.
- and Todd, W. M., β -phenylfurylethylamine and analogous derivatives of thiophen and pyrrole, II, 23.
- Robinson, R. A., thermodynamic study of bivalent metal halides in aqueous solution. II. Activity coefficients of calcium, strontium, and barium chloride at 25°, I, 359.
- and Stokes, R. H., thermodynamic study of bivalent metal halides in aqueous solution. I. Activity coefficients of magnesium halides at 25°, I, 359. Thermodynamic study of bivalent metal halides in aqueous solution. IV. Thermodynamics of zinc chloride solutions, I, 359.
- and Wilson, (Miss) Jean M., thermodynamic study of bivalent metal halides in aqueous solution. III. Activity coefficients of potassium and cadmium iodide at 25°, I, 359.
- See also Harned, H. S.
- Robinson, R. J. See West, L. E.
- Robinson, S., physical fitness in relation to age, III, 341.
- Robinson, S. C., and Brucer, M., range of normal blood pressure, III, 16. Hypertension, body build, and obesity, III, 710. Body build and hypertension, III, 842.
- Brucer, M., and Mass, J., hypertension and obesity; statistical and clinical study of 10,883 individuals, III, 634.
- Robinson, S. K., age distribution, sex incidence, and interrelation of hyperthyroidism and hypertension, III, 386.
- Robinson, W. D., Melnick, D., and Field, H., jun., urinary excretion of thiamin in clinical cases and diagnosis of thiamin deficiency, III, 512. Correlation between concentration of bisulphite-binding substances [B.B.S.] in blood and urinary thiamin excretion, III, 593.
- See also Field, H., jun., and Melnick, D.
- Robinson, W. L. See Campbell, W. R.
- Robles, H. de V., effect of cyclisation on electric moment of organic molecules, I, 197.
- Robley. See Auger, P.
- Roblin, R. O., jun., and Bell, P. H., oxidation-reduction potentials and mode of action of sulphanilamide, I, 119.
- Roblin, R. O., jun., Williams, James H., Winnek, P. S., and English, J. P., chemotherapy. II. Heterocyclic sulphanilamido-compounds, II, 359.
- and Winnek, P. S., chemotherapy. I. Substituted sulphanilamidopyridines, II, 359.
- Robotti, T. See Torrioli, M.
- Robschheit-Robbins, F. S., and Whipple, G. H., influence of valine and isovaleric acid on haemoglobin production, III, 9. Haemoglobin production factors in liver, fish, frogs, and turtle compared with domestic animals, III, 90.
- See also Whipple, G. H.
- Robson, J. M., prolongation of pregnancy in hypophysectomised rabbit by progesterone and oestrogens, III, 662.
- and Adler, J., site of action of oestrogens, III, 736.
- See also Bonser, G. M., Dawson, R. F., and Schönberg, A.
- Robson, W. See Baptist, N. G.
- Robuschi, L., and Simmons, G., effect on blood-sugar of cardiazol alone and with insulin, adrenaline, or glucose, III, 840.
- Roch, M., alcoholism in the medical clinic of Geneva in 1933—1936, III, 257.
- Roche e Silva, M., kallikrein and histamine, III, 680. Pharmacology of trypsin. I. Action on guinea-pig's small intestine and uterus; release of histamine from perfused lung. II. Action on blood pressure in cat, dog, and rabbit, III, 682.
- Rochat, G. F., can lactoflavin be detected in the human lens? III, 397.
- Roche, J., and Blanc-Jean, G., state of guanidine groupings in protein molecules, II, 317.
- and Bullinger, E., fractionation of the phosphatases of the red blood cells, III, 288. Phosphatases of erythrocytes, III, 349.
- Bullinger, E., and Collet, J., phosphatase of teeth and bony structures of fish (cyclostomes, selachians, and teleosts); comparative biochemistry of ossification, III, 349.
- and Chouaïech, M. S., effect of heat on haemoglobin and reversible stages in the coagulation of proteins, III, 380. Reversibility of denaturation of serum-albumin, III, 531.
- and Collet, J., bone-phosphatase and the growth of the skeleton in the sardine (*Clupea pilchardus*, Walb.), III, 73.
- Collet, J., and Mourgue, M., phosphatase activity and growth of dermal bone; scales of Selachii and Teleostei, III, 536.
- and Derrien, Y., physico-chemical properties of haemocyanins. V. Solubility in presence of neutral salts, state of dispersion, and specificity of various haemocyanins, III, 606.
- Derrien, Y., and Fontaine, M., osmotic pressure and mol. wt. of serum-albumin and -globulin of selachians and cyclostomes, III, 530.
- Derrien, Y., and Moutte, M., specificity and solubility in presence of ammonium sulphate of various haemoglobins, III, 295.
- Olmer, J., and Samuel, L., proteins of ascitic fluid and serum, III, 286.
- and Vieil, H., preparation and mol. wt. of crystalline myoglobin (muscle-haemoglobin) of horse, III, 567.

- Rochelmeyer, H., [with Chen, H.], solasodine, III, 145.
[with Shah, C. S., and Geyer, E.], solatubin. IV., II, 145.
- Rochester, G. D., and Olsson, E., band spectrum of MnF, I, 192.
See also Jenkins, F. A.
- Rochow, T. G., preparation of Grignard reagents from magnesium amalgams, II, 72.
- Stafford, R. W., Davis, D. W., and Gilbert, R. L., cyanamide, dicyanodiamide, and melamine; optical and crystallographic properties, I, 433.
- Rock, G. D. See Fox, F. E.
- Rockwern, S. S., and Snively, D., pancreatic lithiasis with pancreatic insufficiency and diabetes mellitus, III, 742.
See also Owens, L. B.
- Rodbard, S., and Katz, L. N., elimination of effect of chemical mediator of renal hypertension, III, 293.
- Katz, L. N., and Sokolov, M., reduction of arterial hypertension by subcutaneous implantation of kidney tissue, III, 842.
See also Katz, L. N., and Megibow, R. S.
- Rodden, C. J. See Du Vigneaud, V.
- Roddy, R. L. See Wolman, I. J.
- Roddy, W. T., and O'Flaherty, F., reticular tissue of animal skin, III, 225.
- Rodebush, W. H., and Eddy, C. R., dielectric polarisation in solution. I. Failure of the Clausius-Mosotti equation, I, 284.
See also Buswell, A. M.
- Rodewald, W., importance of connexion between pituitary and brain for release of melanophore hormone, III, 496.
- Oestrogenic action of porphyrins, III, 655.
- Rodgers, E., probable errors in counts from Geiger-Müller counters, I, 376.
- Rodgers, J. W. See Mullins, L.
- Rodin, F. H. See Geiger, J. C.
- Rodin, M. I., and Spivak, G. V., Hall effect in plasma, I, 2.
- Rodman, F. B. S. See Basterfield, S.
- Rodová, H. See Jirovec, O.
- Roe, A. S. See Hurd, C. D.
- Roe, D. E., experimental aspects of psychology of colour, III, 640.
- Roe, (Miss) E. M. F. See Cohen, Aaron.
- Roe, J. H., and Dyer, H. M., relation of nutrition to gastric function. I. Experimental method, III, 34.
See also Kassan, R. J.
- Roe, J. W. See Hartley, G. S.
- Roe, M. A., Lillie, R. D., and Wilcox, A., American azures in preparation of satisfactory Giemsa stains for malaria parasites, III, 837.
- Roebuck, J. R., and Osterberg, H., Joule-Thomson effect in mixtures of helium and argon, I, 406.
- Roeder, K. D., synchronous activity in optic and photocerebral ganglia of grasshopper, III, 197. Rubber cast of dogfish spiral valve, III, 698.
- Röhlinger, H., alteration of mineral salt content of skin after physico-therapeutic treatment (Liesegang's method of incineration), III, 241.
See also Lampert, H.
- Roelcke, K., *Bacterium coli imperfectum* and its relation to the stimulants from typhus, paratyphus, and enteritis group and to *B. coli commune*, III, 769.
- Roelsen, E., and Bay, N., lung function in silicotics, III, 387.
- Roemer, F. J. See Kingsbury, B. F.
- Roeper, H., action of sea baths on respiratory quotient, III, 18.
- Roepke, R. R., and Hetherington, W. A., osmotic relation between aqueous humour and blood plasma, III, 892.
- and Mason, H. L., micelle formation in aqueous solutions of bile salts, III, 447.
- and Visscher, M. B., osmotic relationships between blood plasma and intestinal fluid during absorption, III, 38.
- Rösch, S., properties and uses of sheet polarising media, I, 446.
- Rössel, W. See Kohl, H., and Schlomka, G.
- Roessler, H., Gibson, G. G., and Hussey, R., correlation study between retinal vascular changes, electrocardiographic alterations, and radiological heart size in essential hypertension, III, 711.
- Röttger, G. See Zetzsche, F.
- Röttger, J. See Schmitt, F.
- Roß, F. S., and Glaesbrook, A. J., use of vitamin-C in gingivitis of adolescents, III, 515.
- Roffo, A. H., carcinogenic action of phenanthrene compounds derived from cholesterol, III, 316. Physico-chemical aetiology of carcinoma [and action of sunlight], III, 506.
- Rogen, A. S., calcium gluconate and blood viscosity, III, 629.
- Rogers, A. F., monticellite rock from Crestmore, California, I, 239.
- Rogers, B. G., and Henze, H. R., synthesis of 5:5-disubstituted hydantoins from s-dialkoxypyrrolones and related compounds, II, 298.
- Rogers, C. H. See Brecht, E. A.
- Rogers, E. C., basal metabolism of Connecticut State College students, III, 326.
- Rogers, E. F. See Adams, R.
- Rogers, F. T., jun., theory of the electrostatic β -particle energy spectrograph. II, I, 176. Construction of very sensitive vacuum thermo-electric cells, I, 446.
See also Rogers, M. M.
- Rogers, G. A. See Canzanelli, A.
- Rogers, H. E. See Cupp, S. B.
- Rogers, L., antimony treatment of kala-azar, III, 526.
- Rogers, M. M., McReynolds, A. W., and Rogers, F. T., jun., masses and velocities of three radium-B β -particles; relativistic mass of the electron, I, 185.
See also Bonner, T. W.
- Rogers, M. T., and Helmholtz, L., redetermination of the parameters in ammonium hydrogen fluoride, I, 349.
See also Helmholtz, L.
- Rogers, R. F. See Stokstad, E. L. R.
- Rogers, T. H., inhibition of sulphate-reducing bacteria by dyes, III, 540.
- Rogers, V. See Boell, E. J., and Needham, J.
- Rogers, W. J., Beamish, F. E., and Russell, D. S., determination of ruthenium by thionalide; absorption of ruthenium tetroxide with hydrogen peroxide, I, 445.
- Rogge, K. See Essen, K. W.
- Roginski, S. Z., and Tartakovskaja, V. E., inter-solvate exchange of bromine ions in various solvents, I, 207.
- Rogoff, J. M., apparatus for constant intravascular injection of liquids, III, 778.
- and Nixon, E. N., insulin hypoglycæmia and adrenaline output from adrenal glands, III, 643.
- Rogovin, Z., and Ivanova, V., solution of cellulose esters. IV. Relation of interaction between individual particles of solute to integral heat of solution of cellulose esters, I, 411.
- Rogowski, F., investigation of *spiropentane* with cathode-ray interferences, II, 72.
- Rogowski, W., Back effect of metastable atoms and decrease in breakdown potential in inert gases, I, 97. Metastable atoms and decrease in breakdown potential in rare gases, I, 306.
- Rogozinski, A. See Goldstein, L.
- Rohdewald, M. See Willstätter, R.
- Rohland, K., determination of residual air in lungs by nitrogen method, III, 295.
See also Anthony, A. J.
- Rohrer, R., dehydration of zinc sulphate heptahydrate by the aqueous method; solubility curve of different hydrates, I, 322.
- Roholm, K. See Iversen, P.
- Rohrbaugh, P. W., stopcock lubricant for use with [organic] solvents, acids, or alkalis, I, 396.
- Rohrman, F. A. See Asselin, F. J.
- Rohrmann, E. See Marker, R. E.
- Roht, P. K. See Goldbloom, A. A.
- Roich, I. L., determination of sensitivity of a photon counter, I, 58.
- Roizin, M. B. See Rubentschik, L. I.
- Rojansky, V., hypothesis of the existence of contraterrene matter, I, 280.
- Rojas, P., and Szepešwol, J., origin of cells in medullary sheath [of nerve] studied *in vitro*, III, 297.
- Szepešwol, J., and Resta, L. S., action of curarising agents on neuro-muscular junction, III, 296.
- Rokitzkaja, M. S. See Melnikov, N. N.
- Roley, W. C. See Haney, H. F.
- Rolf, D. See White, H. L.
- Rolinski, J., and Gajewski, Z., realisation of international scale of temperature between 0° and 660°, I, 82.
- Roll, A. See Schmid, G.
- Rolla, L., integral purification of gadolinium, I, 228.
- Rolla, M., structure of the ions XO₃⁻. I. Raman spectra of chlorates and bromates of bivalent cations, I, 195. Calculation of activity coefficients in aqueous solutions of strong electrolytes, I, 214.
See also Manzoni-Ansidei, R.
- Rollason, E. C., and Hysel, V. B., constitution of lead-rich alloys of lead, antimony, and cadmium, I, 437.
- Rollefson, G. K., and Garrison, W., iodine-sensitised decomposition of methyl alcohol, I, 224.
See also Grahame, D. C., Stoughton, R. W., and Toubes, B.
- Rollefson, R., and Havens, R., index of refraction of methane in the infra-red and dipole moment of the CH bond, I, 288.
- Roller, D. See Molenaar, H.
- Roller, P. S., and Ervin, G., jun., system calcium oxide-silica-water at 30°; association of silicate ion in dilute alkaline solution, I, 217.
- Rollet, J. See Policard, A.

- Rollier, M. A., structure of alloys, I, 66. Probable structure of polonium oxide in relation to that of metallic polonium, I, 150.
- and Cesoni, G., structure of the copper salts of complex cyanides. II. Structure of copper manganate hexacyanide, I, 61.
- See also Quilico, A.
- Rollin, B. V., exchange between a metal and ions in solution using radioactive indicators, I, 125.
- Roman, J., antagonistic effect of the microflora of sour milk on pathogenic microorganisms, III, 75.
- Romanes, G. J., spinal accessory nerve in sheep, III, 482.
- Romaniello, G., protein fractions and coagulatory power of placental blood of foetal circulation, III, 839.
- Romaniuk, N. M., activity of brain- and muscle-cathepsin in avitaminosis-C, III, 674.
- Romano, N., Rey, S., and Molinari, F., blood-cholesterol in hepatic diseases, III, 502.
- Romanoff, A. L., detection of fertility in eggs, III, 808.
- and Cottrell, C. L., bio-electric potentials of the hen's egg, III, 465.
- Romansky, M. J. See Murlin, J. R.
- Romberg, L. D. See Smith, Charles Linton.
- Romeo, F., biochemistry of hypoglycæmic shock. II. Tissue-chlorides, III, 29.
- Romer, A. S., mirror image comparison of upper and lower jaws in primitive tetrapods, III, 781.
- Romhanyi, J. See Kiss, P. von.
- Romig, J. R. See Snyder, H. R.
- Rommel, O. See Schmid, G.
- Rompe, R. See Mögliche, F.
- Ronald, J., duodenal ulcer therapy, III, 133.
- Ronchèse, A. M., direct enumeration of organisms in microbial suspensions, III, 461.
- Rondinini, R., effect of barium and magnesium on contractile activity of heart of chick embryo, III, 382.
- Rondoni, P., mechanism of carcinogenesis, III, 141. Induction of [serum]-protein denaturation with ultra-violet irradiation, III, 882.
- Ronge, G. See Meyer, F. R.
- Ronzio, A. R., semi-micro-Dumas method for difficult compounds, II, 263.
- See also Ferris, L. P., jun.
- Roof, J. G., nomographs for correcting volumes of perfect gases, I, 378.
- Rooksby, H. P., and Partridge, J. H., X-ray study of natural and artificial mullites, I, 180.
- Roome, N. W., effects of hæmorrhage and transfusion on blood flow in an extremity, III, 293.
- Root, H. F., diabetic control versus caloric sufficiency in treatment of diabetes and pulmonary tuberculosis, III, 899.
- See also Coggeshall, C.
- Root, R. W., and Irving, L., influence of oxygenation on transport of carbon dioxide by blood of the marine fish *Tautoga onitis*, III, 843.
- Root, W. S. See Jarcho, L. W.
- Rooyen, C. E. van, chemical composition of molluscum contagiosum inclusion body, III, 78.
- See also Challinor, S. W.
- Roper, E. E., second virial coefficient of ethane, I, 202. Precision cryostat for the range -35° to 25° , I, 234.
- See also Lamb, A. B.
- Ropes, M. W., Rossmel, E., and Bauer, W., relationship between erythrocyte sedimentation rate and plasma-proteins, III, 91.
- See also Robertson, W. van B.
- Rork, R. See Hellebrandt, F. A.
- Rosa, A., effect of sulphanilamide on diphtheria bacilli, III, 60. [Attempted] sterilisation of diphtheria carriers with sulphanilamide, III, 436.
- Rosa-Mato, F. See Gutierrez-Diaz, J. M.
- Rosanova, V. N. See Figurovski, N. A.
- Rose, A., separation of the isomeric hexenes by batch fractionation, II, 201.
- Rose, A. R. See Exton, W. G.
- Rose, B., effect of cortin and deoxycorticosterone acetate on ability of the adrenalectomised rat to inactivate histamine, III, 410.
- and Browne, J. S. L., alterations in blood-histamine in shock, III, 707.
- Karady, S., and Browne, J. S. L., histaminase content of tissues of rat and effect of histamine pretreatment, III, 765.
- and Weil, P. G., blood-histamine in rabbit during anaphylactic shock, III, 287.
- See also Weil, P. G.
- Rose, C. L. See Chen, K. K.
- Rose, C. S. See Du Vigneaud, V., and György, P.
- Rose, D. L., Kendell, H. W., and Simpson, W. M., plasma-agar medium for cultivation of gonococcus, III, 770.
- Rose, E., and Sunderman, F. W., dihydro-tachysterol in parathyroid deficiency, III, 123.
- Rose, J., cell structure of mammary body in mammals and in man, III, 21.
- Rose, M., and Hamon, M., effect of sex hormones on gastropod mollusc: *Milax (Lallemantia) gagates*, Draparnaud, III, 212. Effect of synthetic sex hormones injected in oily solution on flowering and fruiting of higher plants, III, 366.
- Rose, M. E., electric quadrupole and magnetic dipole moments of ^6Li and ^{14}N , I, 54. Scattering and polarisation of electrons, I, 185. Resonance scattering of α -particles, I, 310. Electron path lengths in multiple scattering, I, 336.
- Rose, M. J. See McClelland, E. W.
- Rose, M. S., utilisation of iron by anæmic rats, III, 791.
- Rose, S. B., and Miller, R. E., agar cup-plate method. II. Effect of blood on mercury antiseptics, III, 526.
- See also Flippin, H. F.
- Rose, W. C., and Rice, E. E., significance of amino-acids in canine nutrition, III, 142.
- Rosebury, T., Karshan, M., and Lowenberg, C., dental caries among Eskimos of Kuskokwim area of Alaska. III. Dietary study of three Eskimo settlements, III, 87.
- and Waugh, L. M., dental caries among Eskimos of Kuskokwim area of Alaska. I. Clinical and bacteriologic findings, III, 87.
- See also Karshan, M.
- Rosegger, H., experimental changes of Weltmann's coagulation band, III, 187.
- Roseman, R., Levin, M. B., and Eisenberg, H., precipitates obtained by adding sodium silicate to magnesium sulphate, I, 35. Gelation of magnesium silicate suspensions by carbon dioxide and other agents, I, 211.
- Rosen, I., Rosenfeld, H., Bloom, D., and Krasnow, F., serum-lipins and proteins in lymphogranuloma venereum, III, 96.
- Rosen, S., Shelesnyak, M. C., and Zacharias, L. R., nasogenital relationship. II. Pseudopregnancy following extirpation of sphenopalatine ganglion in rat, III, 905.
- Rosen, S. H., and Marine, D., inhibiting effect of thyroidectomy on adrenal cortex hypertrophy following injections of anterior pituitary extract, III, 121.
- See also Marine, D.
- Rosen, S. R., Ziegler, J. B., and Cominole, B., pharmacological modification of metrazol [cardiazol] convulsions, III, 603.
- See also Remp, D. G.
- Rosenbaum, E. J., Raman spectrum of aluminium bromide, I, 403.
- Rubin, (Miss) D. J., and Sandberg, C. R., Raman spectra of phosphorus methyl and arsenic methyl and force constant of methyl compounds of the fifth group elements, I, 283.
- and Sandberg, C. R., vapour pressures of trimethylphosphine, trimethylarsine, and trimethylstibine, I, 353.
- See also Grosse, A. V.
- Rosenbaum, F. F., and Levine, S. A., auricular standstill, III, 189.
- Rosenbaum, H., chemical mediation in central nervous system, III, 394.
- Rosenbaum, J. D., and Laviates, P. H., lipin-thiocyanate [complex] in serum, III, 287.
- Rosenbaum, S., lymphocytic fever, III, 880.
- Rosenberg, A. See Krollpfeiffer, F.
- Rosenberg, D. H., proved case of recovery from fatty metamorphosis of liver after treatment with lipocain, III, 135. Fusion beats, III, 631.
- and Soskin, S., azorubin S test of liver function: evaluation with comparative study of the bromsulphalein and hippuric acid tests, III, 665.
- Rosenberg, E. E., and Epstein, N. N., use of intravenous sodium chloride in pyrotherapy, III, 605.
- Rosenberg, E. F., brain in malignant hypertension, III, 476.
- See also Bagenstoss, A. H.
- Rosenberg, H. A., and Levine, M. I., study of 1852 chest roentgenograms of tuberculous contacts under age of 5 years; [relation to results of Mantoux test], III, 76.
- Rosenberg, L. E., post-mortem autodigestion of intestinal mucosa of turkey, III, 626.
- Rosenberg, M., formation and division of binucleate giant cells in *Microstérias americana* (Ehrenb.), Ralfs., III, 694.
- Rosenberg, S. J., and Langworthy, O. R., abnormalities in tone and contraction of rectum in paraplegia and hemiplegia, III, 39.
- Rosenberg, Z. See Bureš, E.
- Rosenblatt, E. F., hydrogenation of benzoquinone with palladium and platinum catalysts, II, 283.
- Rosenbloom, A. B. See Sobotka, H.

- Rosenblueth, A. [with Therman, P. O., and Lissak, K.], electrical excitability of mammalian striated muscle, III, 796.
- and Dempsey, E. W., Wallerian degeneration, III, 391.
- Lissak, K., and Lanari, A., explanation of five stages of neuro-muscular and ganglionic synaptic transmission, III, 393.
- and Luco, J. V., fifth stage of neuro-muscular transmission, III, 108. Neuro-muscular "transmission-fatigue" produced without contraction during curarisation, III, 108.
- See also Lanari, A.
- Rosenblum, C., and Flagg, J. F., artificial radioactive indicators, I, 3.
- Rosenblum, L. A., and Jolliffe, N., application to urine of Bandier and Hald's method for determination of nicotinic acid, III, 667. Porphyrinuria in pellagra, III, 717.
- See also Jolliffe, N.
- Rosenblum, P. See Friedman, M., and Klein, R. I.
- Rosenbohm, A., tryptophan content of albumin-II fraction of serum of normal and carcinoma rats, III, 590.
- Rosenbohm, E. See Jaeger, F. M.
- Rosenfeld, H. See Peck, S. M., and Rosen, I.
- Rosenfeld, S., and Glass, S., inhibiting effect of snake bloods on hemorrhagic action of viper venom on mice, III, 469.
- Rosenfels, R. S. See Hassid, W. Z.
- Rosenkranz, K. D., placental hormones in prolonged pregnancy, III, 31.
- Rosenmund, K. W. See Külz, F.
- Rosenow, E. C., failure of sulphapyridine to protect against experimental (virus) poliomyelitis, III, 861. Application of cutaneous test in relation to acute sporadic and epidemic poliomyelitis, 1939, III, 870. Specific streptococcal antibody-antigen reactions of skin and serum of monkeys during experimental poliomyelitis, III, 870.
- Rosensohn, M. See Snow, W.
- Rosenstein, F. See Belk, W. P.
- Rosenthal, G., very sensitive thermoelement for the determination of radiation, I, 271.
- Rosenthal, (Miss) J. E., virtual levels of ^9Be and the α -particle model, I, 385.
- Rosenthal, L., action of sulphanilamide *in vitro* on aerobic sporogenic bacilli, III, 520.
- Fialka, S. M., and Kamlet, J., clinical study of alum-precipitated insulin, III, 305.
- Rosenthal, N., and Vogel, P., granulocytopenia from sulphapyridine in children, III, 8.
- Rosenthal, O., Fuchs reaction for cancer, III, 229.
- Rosenthal, R. See Brescia, F.
- Rosenthal, S. M., experimental chemotherapy, III, 598.
- and Bauer, Hugo, breakdown of the sulphanilamide molecule by ultraviolet irradiation or chemical oxidation, II, 303. Colorimetric tests for oxidation products of sulphanilamide, III, 242.
- See also Bauer, Hugo.
- Rosenthal, S. R., and Minard, D., histamine as chemical mediator for cutaneous pain, III, 392.
- See also Lambert, E. H., and Minard, D.
- Rosenthaler, E. See Miescher, E.
- Rosenthaler, L., determination of elements in organic substances, II, 239. Detection of organic compounds, II, 240. Bromo-derivatives of aromatic esters, II, 373. Determination of ascorbic acid, III, 236.
- Rosenzweig, H. See Meltner, M.
- Rosi, R. See Fox, W. W.
- Roskam, J., and Lasareff, V., wetting of glass surfaces after contact with opsonising or non-opsonising plasma, III, 259.
- See also Lasareff, V.
- Rosner, L., reaction between iodoacetic acid and denatured ovalbumin, III, 315.
- Rosner, R., significance of finger reflex, III, 571.
- Ross, A. S., and Maass, O., density of gaseous chlorine, I, 202.
- Ross, A. T., and Dickerson, W. W., epilepsy complicated by uncontrollable diabetes mellitus, III, 844.
- Ross, B. D. See Harris, R. S.
- Ross, C. P., quicksilver deposits of the Terlingua region, Texas, I, 422.
- Ross, E. L., experiences with a vital stain on otolaryngological tissues, III, 205.
- and Hamilton, J. W., penetration of the inner ear by mercurochrome, III, 26.
- Ross, E. S., and McLean, F. C., influence of growth hormone of anterior pituitary on growth in long bones of rat, III, 847.
- Ross, H., physiological causes of the varieties of reciprocal *Epilobium* hybrids, especially the rôle of growth-substances, III, 365.
- See also Hopkins, R.
- Ross, H. E. See Stephenson, D.
- Ross, J. F. See Hahn, P. F.
- Ross, J. R., pharmacological shock treatment of schizophrenia, III, 22.
- and Malzberg, B., results of pharmacological shock therapy and metrazol convulsive therapy in New York State, III, 487.
- Ross, M. A. See Korenchevsky, V.
- Ross, P. W. See Barnard, R. D.
- Ross, R. A. See Butler, A. M., Hamblen, E. C., and Miller, H. C.
- Ross, V., response to type I pneumococcal vaccine of persons belonging to different blood groups, III, 453.
- Rossett, N. E., skin reactions to extract prepared from gonococcus bouillon filtrate, III, 263.
- Rossi, A., activation of arginase, III, 71.
- and Del Regno, F., enzymic fission of thymonucleic histone, III, 71.
- and Travia, L., oxidation of citric acid in muscle, III, 713. Myoglobin, III, 888.
- Rossi, B., electrons arising from disintegration of cosmic-ray mesotrons, I, 187. Disintegration of mesotrons, I, 190. System of units for nuclear and cosmic-ray phenomena, I, 280.
- Hilberry, H. van N., and Hoag, J. B., disintegration of mesotrons, I, 5. Variation of hard component of cosmic rays with height and disintegration of mesotrons, I, 187.
- See also Jánossy, L.
- Rossi, G., and Simonelli, G., testing of gas masks, III, 865.
- Rossier, P. H., and Dressler, M., familial endocrine diseases with gastric ulcer, III, 206.
- Dressier, M., and Simmen, R., central carotid sinus syndrome, III, 884.
- Rossini, F. D., and Deming, W. E., assignment of uncertainties to the data of chemistry and physics, with specific recommendations for thermochemistry, I, 74.
- and Glasgow, A. R., jun., reflux regulator and head for laboratory rectifying columns, I, 43.
- Knowlton, J. W., and Johnston, H. L., heat and free energy of formation of deuterium oxide, I, 323.
- and Prosen, E. J. R., energies of isomerisation of hexanes, I, 413.
- Rossinskaja, I. M. See Kotscheschkov, K. A.
- Rossiter, R. J., factors affecting oxidation of alanine by liver, III, 908.
- See also Ochoa, S.
- Rossmann, I., deciduoma reaction in rhesus monkey (*Macaca mulatta*). I. Epithelial proliferation, III, 738.
- Rossmann, P. L. See Feil, H.
- Rossmel, E. See Ropes, M. W.
- Rossmel, E. C. See Beckman, W. W.
- Rostagni, A., positive and neutral rays. V. Ionisation by collision of ions and atoms, I, 382.
- Rostkowski, A. P., double decomposition in absence of a solvent. L. Complex mutual system: potassium and thallium nitrates, chlorides, and sulphates, I, 413.
- Rostock, P., arrest of hæmorrhage and blood substitution, III, 186.
- Roswell, C. A., small Buchner funnel for qualitative organic analysis, II, 318.
- See also Baker, R. H., and Barkenbus, C.
- Rotariu, G. J. See Freed, S.
- Rotblat, J., application of coincidence method to testing the lifetime and level scheme of radium-C', I, 2.
- Roth, E. A. See De Takats, G.
- Roth, G. M. See Prickman, K. E., and Sheard, C.
- Roth, H. See Reichert, P.
- Roth, N., and Herman, M., unusual neuropsychiatric sequelæ of carbon monoxide poisoning, III, 19.
- Roth, P., elimination of vaccine virus by the lymphatic organs of the rabbit intestine, particularly the appendix, and the biological function of the tonsils, III, 456.
- Roth, R. T. See Niederl, J. B.
- Roth, W. A., equilibria in hydrofluoric acid solutions, I, 116.
- Boerger, E., and Siemonsen, H., heats of formation and solution of hydrogen chloride, bromide, and iodide, I, 217.
- and Wolf, U., heat of formation of chromic oxide, I, 295. Heats of formation of calcium aluminates, I, 323.
- Wolf, U., and Fritz, O., heats of formation of aluminium oxide (corundum) and lanthanum oxide, I, 295.
- Rothbard, S., experimental arthritis in rat produced by a group A hæmolytic streptococcus, III, 936.
- Rothberger, C. J., and Sachs, A., interference and parasystole in left auricle strips, III, 14.
- Rothchild, I., and Meyer, R. K., maintenance of pregnancy in castrate rats by progesterone, III, 850.
- Meyer, R. K., and Spielman, M. A., quantitative study of œstrogen-progesterone interaction in formation of placentaloma in castrate rat, III, 661.
- Rothé, E., and Hée, (Mme.) A., radioactivity of rocks, I, 178.

- Rothmund, P., porphyria. II. Structure of the porphyrin ring system, II, 27.
- Rothén, A., and Landsteiner, K., adsorption of antibodies by egg-albumin films, III, 79.
- and Levene, P. A., rotatory dispersion and absorption spectra of carboxylic acids and hydrocarbons containing a phenyl or cyclohexyl group, I, 11.
- See also Claude, A.
- Rotherberg, R. E., and Teicher, I., diabetes mellitus and peptic ulcer, III, 36.
- Rothermich, N. O., effects of male and female sex hormones on human vaginal smear, III, 212.
- and Foltz, L. M., effects of male and female sex hormones on pituitary gonadotropic function in women, III, 735.
- See also Haam, E. von.
- Rothermundt, M., and Burschies, K., [therapeutic] aromatic arsenic compounds, III, 443.
- Rothlin, E., relationship between chemical constitution and pharmacological action of cardiac glucosides, III, 923.
- See also Raymond-Hamet.
- Rothman, S., and Coon, J. M., pilomotor action of nicotine; new pharmacodynamic test of skin, III, 199. Liberation of acetylcholine in skin, III, 679. Axon reflex responses to acetylcholine in skin, III, 679.
- See also Coon, J. M.
- Rothman, T. See Feinier, L.
- Rothmann, S., oxidation of tyrosine by ultra-violet light in its relation to human pigmentation, III, 930.
- Rothschild, (Lord), rhythmical impedance changes in trout's egg, III, 649.
- See also Hubbard, M. J.
- Rothschild, F., and Berger, E., effects of extracts of intestinal mucosa on blood-sugar, basal metabolism, and diastase, III, 415.
- Rothschuh, K. E., monophasic cardiac action potentials, III, 289.
- Rothstein, M. See Rothstein, R. B.
- Rothstein, R. B., and Rothstein, M., derivatives of cyclopentane, II, 44.
- Rothwell, H. E. See Bulmer, F. M. R.
- Rottenstein, H. See Lee, O. S.
- Rouault, (Mme.), M., L-spectrum of tungsten (74); intense lines, I, 1.
- Rouch, J., measurement of p_{H} in the Atlantic and Pacific Oceans, I, 44.
- Rouris, G. See Dupont, G.
- Rourke, G. M. See Stewart, J. D.
- Rous, P., and Kidd, J. G., activating, transforming, and carcinogenic effects of rabbit papilloma virus (Shope) on implanted tar tumours, III, 911.
- See also Kidd, J. G.
- Rouse, A. H. See Myers, P. B.
- Roushdi, I. See Linnell, W. H.
- Roussay, G., and Mosinger, M., rôle of cutaneous vessels in man, III, 384.
- Roussel, G. See Gruzewska, Z.
- Rousselot, L. M., congestive splenomegaly (Banti's syndrome), III, 788.
- Roussel, A. See Cabannes, J.
- Roussin, See Drevon, B.
- Roussinov, L. I. See Grinberg, A. P.
- Roux, E. R., form of low-temperature injury in detached leaves, III, 871. Respiration and maturity in peaches and plums, III, 941.
- See also Dönen, I.
- Roux, H. See Chevallier, A.
- Rovati, B., effect of citrin (vitamin-P) on time of coagulation of blood, III, 880.
- Rovenstine, E. A. See Marangoni, B. A.
- Rovira, L. See Sagastume, C. A.
- Rovira, S., determination of nitrogen as ammonia in monosubstituted carbamides, carbamates, allophanates, and semicarbazones, II, 32.
- Row, L. R., and Seshadri, T. R., synthetic experiments in benzopyrone series. II. Synthesis and derivatives of flavono- and coumarino-7':5:4-furan-3-ones, II, 286.
- Row, T. P. See Srikantia, C.
- Rowbotham, G. F., effects of trigeminal denervation, III, 716.
- Rowe, G. A. See Barrett, P. A., and Linstead, R. P.
- Rowe, L. W., local anæsthetic action of esters of aminonaphthoic acid, III, 760.
- Rowe, T. D., effect of fresh *Aloe vera* gel on [healing of] third-degree X-ray reactions in rats, III, 929.
- Rowinski, P., phosphorus metabolism in kidney in relation to glucose reabsorption, III, 418.
- Rowlands, I. W., rate of appearance of antiluteinising activity in serum of rabbits injected with extract of ox pituitary gland, III, 494. Progonadotropic and antithyrotropic activity of antisera to extracts of anterior pituitary gland, III, 495.
- and Sharpey-Schafer, E. P., oestrogen and pituitary, III, 652.
- and Spence, A. W., antigonadotropic activity in man, III, 214.
- See also Chance, M. R. A.
- Rowlands, V. W. See Owen, E. A.
- Rowley, H. H., mutarotation of α -D-glucose in ethanol-water mixtures at 25°, I, 443.
- and Bailey, S. D., mutarotation of D-glucose in absolute methanol, I, 442.
- Rowntree, L. G., three cases of "clinical" Addison's disease surviving more than fifteen years, III, 728. Thyroid therapy in juvenile myxœdema, III, 894. Survival time in treated Addison's disease, III, 897.
- Roy, A. C. See Chopra, R. N., and Mitra, K.
- Roy, B. K. D. See Ghosh, N. K.
- Roy, B. S. See Ray, J. N.
- Roy, D., aluminium monoxide bands, I, 192.
- Roy, D. N., influence of spermathecal stimulation on physiological activities of *Anopheles subpictus*, III, 649.
- Roy, M. See Boutaric, A.
- Roy, M. F. See Marvel, C. S.
- Roy, P. C. See Ghosh, D. N.
- Roy, S. C. See Lal, R. B.
- Roy, S. K., and Mukherjee, A. N., geology and petrology of the iron ore deposits of Mandi State, Punjab, I, 179.
- See also Rudra, M. N.
- Royds, J. E. See Erskine, J.
- Royer, G. L., determination of indium by micro-methods, I, 373.
- See also Norton, A. R.
- Royer, M., bilirubin and urobilin content of bile, III, 40.
- and Bogetti, H., bilirubin and urobilin in blood and urine of hepatectomised rats, III, 312.
- Royster, C. L. See Whittemore, W. L.
- Rozenfeld, L. E., and Goldman, S. S., oxidation processes in central nervous system during ontogenetic development. I. Catalase and peroxidase. II. Variations in glutathione and ascorbic acid contents and redox potential, III, 623, 718.
- Rozenfeld, L. E., Ruchelman, A. A., and Shuravskaja, A. A., nature of enzymes. I. Amylase and pepsin, III, 72.
- Rozenkranc, D. See Kobryner, A.
- Rozova. See Jermolenko, N. F.
- Rozzell, J. D. See Mason, M. F.
- Ruark, A. E., multiple scattering of charged particles, I, 92.
- and Pardue, E., phenomena in a cloud chamber operated without a sweep field, I, 235.
- See also Driscoll, R. I., Gautier, T. N., and Jones, C.
- Ruben, S., Hassid, W. Z., and Kamen, M. D., radioactive nitrogen in the study of nitrogen fixation by non-leguminous plants, III, 775.
- and Kamen, M. D., radioactive carbon of long half-life, I, 186. Radioactive carbon in study of respiration in heterotrophic systems, III, 932.
- Kamen, M. D., Hassid, W. Z., and DeVault, D. C., photosynthesis with radio-carbon, III, 364.
- See also Barker, H. A., and Carson, S. F.
- Rubens, E., hereditary cleidocranial dysostosis, III, 551.
- Rubens, S. M., and Henderson, J. E., characteristics and function of anode spots in glow discharges, I, 425.
- See also Henderson, J. E.
- Rubenstein, B. B. See Gerbi, C.
- Rubenstein, A. L., migraine, epilepsy; their association with hypothyroidism, III, 123.
- Rubentschik, L. I., halophilic bacteria of salt lakes, III, 75.
- and Roizin, M. B., effect of fixed nitrogen on *Azotobacter*, III, 74.
- Rubin, B. See Fisher, A. E.
- Rubin, B. A., and Sissakjan, N., peculiarities of enzyme system of apple leaves and their physiological importance, III, 363. Influence of salts on enzymic activity in a living cell under low-temperature conditions, III, 363.
- Rubin, (Miss) D. J. See Rosenbaum, E. J.
- Rubin, E. L., and Pappworth, M. H., symptomless pericarditis, III, 884.
- Rubin, H. J. See Kohn, J. L.
- Rubin, H. S. See Topper, A.
- Rubin, I. C., X-ray demonstration of sub-mucous myomas by combined use of hippuran and injection of carbon dioxide, III, 127.
- and Davids, A. M., pharmacodynamic effects of testosterone propionate on contractions of rabbit oviduct determined by CO₂ insufflation, III, 645.
- Rubin, J. See Miller, B. F.
- Rubin, L. C., and Cipollaro, A. C., onychodystrophy caused by cervical rib, III, 178.
- See also Benedict, M.
- Rubin, M. See Fried, J.
- Rubin, M. A., electro-encephalogram of schizophrenic patients during administration of vitamin-B₁₂, III, 299. Electro-encephalography in the psychoses, III, 485.
- and Freeman, H., brain potential changes in man during cyclopropane anaesthesia, III, 485.
- Rubin, M. I., allergic intestinal bleeding in newborn; a clinical syndrome, III, 908.
- Rubin, N., and Day, A. R., analogues of ephedrine and adrenaline containing the morpholine nucleus and their esters, II, 143.

- Rubin, S. H., plasma- and erythrocyte-lipins in persistent (diabetic) lipæmia and in transient (alimentary) lipæmia, III, 287.
- and Ralli, E. P., effect of depancreatization and ligation of pancreatic ducts on blood- and liver-lipins of dogs, III, 907.
- See also Ralli, E. P.
- Rubin, S. S., Aaronson, A. L., Kaplan, M. A., and Feinberg, S. M., potassium salts in pollinosis, III, 863.
- Rubino, A., cataract and scleroderma; (Rothmund-Werner syndrome), III, 573.
- Rubinstein, A. M., complex compounds of platinum and complex amines. I. and II., I, 172, 299.
- Rubinstein, B. B. See Smith, R. M.
- Rubinstein, D. L., and Kusmina, J. L., du Noüy phenomenon, III, 283.
- Rubinstein, H. S., Abarbanel, A. R., and Kurland, A. A., effect of castration on body weight and length, III, 33.
- and Kurland, A. A., effect of small doses of testosterone propionate on testis, III, 734, 901.
- Kurland, A. A., and Goodwin, M., growth-depressing effect of testosterone propionate, III, 216.
- Rubinstein, M., action of extracts of chick embryos *in vivo*, III, 784.
- Rubinstein, R. I. See Morrison, M.
- Rubtsov, M. V., β -arylaminoacrylic esters. II. Use of β -arylaminoacrylic esters for synthesis of *N*-aryl-substituted pyridone-carboxylic acids, II, 24. Synthesis of isomerides of hydroquinone. I. (5-Ethyl-2-quinuclidyl)-(6-methoxy-8-quinolyl)-carbinol, II, 58.
- Ruch, T. C. See Inay, M.
- Ruchelman, A. A., and Shuravskaja, A. A., biochemical changes in heart and aorta during growth, III, 708.
- See also Rosenfeld, L. E.
- Ruchhoff, C. C., Kaehmar, J. F., and Moore, W. A., removal of glucose from substrates by activated sludge, III, 540.
- Rudall, K. M. See Fraenkel, G.
- Rudberg, S. See Wahlgren, F.
- Ruddy, M. V., respiratory activity of liver tissue in normal and vitamin-A-deficient rats, III, 516.
- Rude, J. C. See Dresser, R.
- Rudenko, E. I. See Nikolaev, V. I.
- Rudney, H., utilisation of *L*-glucose by mammalian tissues and bacteria, III, 859.
- Rndniok, P. See Ingersoll, L. R.
- Rudolf, W., *C*-avitaminosis on pure meat diet, III, 915.
- Rudolph, L. See Ivy, A. C.
- Rudra, M. N., rôle of manganese in biological synthesis of ascorbic acid, III, 235.
- and Roy, S. K., serum-phosphatase in pulmonary tuberculosis, III, 522.
- Rudy, A., deficiency disease in patient with diabetes mellitus, III, 848.
- Rüdorff, W., crystal structure of acid compounds of graphite, I, 100.
- Ruedy, J. E., design and performance of an electron diffraction camera, I, 446.
- Rüegger, A. See Karrer, P.
- Rueggesser, J. M. See Vilter, R. W.
- Rühl, A., and Kühn, W., effect of carbon dioxide on oxygen consumption, III, 195.
- Ruehle, A. E., and Jaycox, E. K., use of the spectrograph and densitometer for spectrophotometry and colorimetry, I, 330. Quantitative spectrochemical analysis of dilute solutions; safe alternating-current-high-voltage arc circuit, I, 372.
- See also Jaycox, E. K.
- Rufer, A. See Guyer, A.
- Ruff, G. See Modern, F.
- Ruff, O., and Li, S. C., equilibrium $2\text{COF}_2 \rightleftharpoons \text{CO}_2 + \text{CF}_4$, I, 25.
- Ruff, S., action of centrifugal forces on the organism in aeroplanes, III, 195.
- Ruge, H., liver function in fresh malaria, III, 220.
- Ruggiero, W. F. See Co-Tui, F. W., and Shapiro, B. G. P.
- Ruggli, P., and Burckhardt, E., nitration of 1-naphthaldehyde, II, 222. Nitration of 2-naphthol-1-aldehyde, II, 222.
- and Frey, Hugo, heterocyclic compounds containing nitrogen. XLV. Nitrosation of primary amines (diaminoisophthalaldehyde. III.). 4:5:6-Triaminoisophthalaldehyde and its condensations. XLVI. 4:6-Diaminoisophthalaldehyde, II, 26.
- Ruggy, G. H., and Smith, Clayton S., physiologically active substance in *Passiflora incarnata*, III, 695. [Pharmacology of] active principle of *Passiflora incarnata*, III, 759.
- Rugh, R. See Marsland, D. A.
- Ruh, E. L. See Dean, E. W.
- Ruhemann, M. See Newitt, D. M.
- Ruhkopf, H., cyclotetramethylenepyrazolone, II, 108.
- Ruigh, W. L. See Fernholz, E.
- Ruitinga, P., Gaarenstroom, J. H., and Overbeek, H. A., hypophysis and blood picture, III, 493.
- Ruiz Moreno, G. See Castex, M. R.
- Rukavishnikov, V. See Alchazov, D.
- Rule, A. M. See Kolmer, J. A.
- Rula, H. G. See Pryde, A. W. H.
- Rullier, G. See Fernbach, E.
- Rumford, F., correlation of adsorption and catalytic activity. II. Carbon monoxide and hydrogen adsorption on zinc-chromium catalysts, I, 261.
- Rumjantzev, A. V., influence of "vital" stains on carbohydrate mechanism of *in vitro* growing tissue, III, 624.
- Rumold, M. J., technique for producing carotid loops in dogs, III, 633.
- See also Major, R. H.
- Rumpl, K., and Mecke, R., absorption spectra in the near infra-red of thick layers of benzene derivatives, I, 7.
- Rundall, F. G. See Barrett, P. A.
- Rundle, F. F. See MacLagan, N. F.
- Runnström, J., Borei, H., and Sperber, E., point of attack by fluoride in fermentation by yeast, III, 867.
- Sperber, E., and Barany, E., cozymase in adrenalectomised rats, III, 497.
- Sperber, E., and Karlsson, E., permeability of cells of baker's yeast for pyruvic acid under different physiological conditions, III, 449.
- Runtzo, A. P., effect of capillarity on periodicity constant, I, 440.
- Ruoff, P. M. See Rice, F. O., and Smith, L. I.
- Ruotolo, A., histo-physiology of human penial fascia, III, 701.
- Rupe, H., and Häfninger, F., camphorquinone and diazomethane, II, 136.
- Optical superposition, II, 137.
- Rupp, J. J. See Bischoff, F.
- Ruppel, W., rest mass of the electron, I, 143.
- Rurkand, H. See Steinitz, K.
- Rusanova, A. I., oxidation-reduction potential of iodine. I., I, 75.
- Rusanova, K. See Essin, O.
- Rusch, H. P., Baumann, C. A., and Kline, B. E., effect of local applications on development of ultra-violet tumours, III, 316.
- Baumann, C. A., and Maison, G. L., production of internal tumours with chemical carcinogens, III, 422.
- Klatt, T., Meloche, V. W., and Dirksen, A. J., effect of serum-proteins on polarographic curve, III, 839.
- See also Baumann, C. A.
- Ruschig, H. See Ehrhart, G.
- Rushbrooke, G. S., statistical mechanics of assemblies whose energy levels depend on temperature, I, 430. Alloys with composition near Al_2Cu , I, 437.
- and Coulson, C. A., thermodynamic derivation of Langmuir's isotherm, I, 291.
- See also Coulson, C. A.
- Rushton, E., and Pratt, E. J., screened mercury-electrode clamps for dielectric measurements, I, 446.
- See also Hartshorn, L.
- Rusinov, L. I., and Jusefovitch, A. A., energy of conversion electrons arising in the transformation of bromine isomerides, I, 3. X-Ray emission from isomerides of radioactive bromine, I, 3.
- Rusk, H. A. See Weichselbaum, T. E.
- Ruska, E. See Borries, B. von.
- Ruska, H., visibility of bacteriophage lysis in supermicroscope, III, 543.
- See also Kausche, G. A., and Wolpers, C.
- Ruskin, S. L., parallel action of vitamin-C and calcium, III, 429.
- and Jonnard, R., physico-chemical properties of the gluconate and ascorbate of calcium and of vitamin-C, III, 145.
- Russ, J. D., and Collins, C. G., stilboestrol in prepuberal vulvovaginitis, III, 810.
- Russ, S., and Scott, G. M., evidence of resistance to tumour grafts in the offspring of immunised rats, III, 748. Effect of radium and radon on ovary, III, 808. Effect of X-rays on tumour growth when the tumour itself is not irradiated, III, 912.
- Russell, A., Frye, J. R., and Mauldin, W. L., vicinal substituted resorcinols. I. Alkylresorcinols; synthesis of γ -ethyl-, γ -*n*-propyl-, and γ -*n*-butyl-resorcinol, II, 304.
- Russell, A. S. See Simons, J. H.
- Russell, C. D., and Pauling, L., magnetic properties of the compounds ethyl-carbimide-ferrohaemoglobin and glyoxaline-ferrihaemoglobin, I, 15.
- Russell, D. S., and Falcones, M. A., local action of sulphonamides on brain, III, 921.
- See also Fischmann, C. F., Hunter, D., Innes, J. R. M., and Rogers, W. J.
- Russell, H. See Weisman, D.
- Russell, H., jun., See Stevenson, D. P.
- Russell, H. N., King, R. B., and Moore, (Miss) C. E., arc spectrum of cobalt, I, 423.
- Russell, H. W., Lucks, C. F., and Turnbull, L. G., two-colour optical pyrometer, I, 374.
- Russell, J. See Vanselow, W.

- Russell, J. A., effects of anterior pituitary and adrenal cortical extracts on metabolism of adrenalectomised rats fed on glucose, III, 121. Relationship of anterior pituitary and adrenal cortex in metabolism of carbohydrate, III, 847.
- Russell, K. F., case of complicated extrophy of the bladder presenting many unusual features, III, 464.
- Russell, W. C., and Morris, M. L., vitamin-A deficiency in the dog, III, 50.
- Taylor, M. W., and Duncan, M. T., bone development in normal and rachitic rats, III, 54.
- Taylor, M. W., and Polskin, L. J., fat requirements of the growing chick, III, 913.
- See also Morris, M. L.
- Russell, W. R., neurological complications of pregnancy, III, 20.
- Russo, C., ultrafiltration of diphtheria toxin and anatoxin, III, 452.
- Russu, I. G. See Papilian, V.
- Rust, F. F., and Vaughan, W. E., high-temperature chlorination of olefine hydrocarbons, II, 361. High-temperature chlorination of paraffin hydrocarbons, II, 361.
- Rust, G. W., geologic occurrence of gratonite at Cerro de Pasco, Peru, I, 334.
- Rustum-Maluf, N. S., blood of arthropods, III, 467.
- Rutgers, A. J., streaming potentials and surface conductance, I, 115.
- Rutgers, G. A. W. See Milatz, J. M. W.
- Ruth, H. S., Tovell, R. M., Milligan, A. D., and Charleroy, D. K., pentothal sodium, III, 251.
- Ruth, W. A. See Lawrenz, M., and Shields, J. B.
- Rutherford, R. B. See Emery, E. S.
- Rutledge, E. K. See Whitehead, R. W.
- Rutovsk, B. N. See Liubomilov, V. I.
- Ruttewit, K., and Masing, G., alloys of germanium with bismuth, antimony, iron, and nickel [and of silicon with nickel], I, 250.
- Ruyssen, R. G., saponins. IV. Effect of saponin on crystallisation of barium sulphate, I, 157. Elektrokinetics. XXII. Electrokinetic potentials of barium sulphate in solutions of electrolytes and in 50% ethyl alcohol, I, 212.
- Ruyter, J. H. C. See Heringa, G. C.
- Ruz, O. See Lipschütz, A.
- Ruzicka, L., and Brenner, M., triterpenes. LI. Transformation of betulin into lupeol, II, 18.
- and Dalma, G., *Erythrophleum* alkaloids. II. Carbon skeleton and position of the double linking in cassiaic acid, II, 28.
- Goldberg, M. W., and Meister, H., components of blood. I. Isolation of dimethylsulphone from ox blood, III, 562.
- and Kaufmann, S., diterpenes. XXXIX. 6-Ethylretene, II, 161.
- and Markus, R., steroids and sex hormones. LXI. Synthesis of 1-methylchrysene, II, 162.
- and Marxer, A., triterpenes. LIII. Conversion of hederagenin into a transformation product of α -boswellic acid, II, 137.
- and Meldahl, H. F., steroids and sex hormones. LIX. Constitution of the hexadecahydrochrysene derivatives formerly known as "neopregnene compounds." LXII. $\Delta^{5,17}$ -3-trans-Hydroxy-17 α -methyl-D-homoandrosteradiene and its transformation products, II, 180, 218.
- Ruzicka, L., and Schinz, H., substances with odour of violets. IX. Synthesis of nuclear-methylated homologues of ionone, 1:1:3:6-tetramethyl-2- γ -keto- Δ^5 -butenylcyclohexene, II, 347.
- Schinz, H., and Seidel, C. F., substances with odour of violets. VII. Synthetic problems in the irone series; synthesis of 3:5:5-trimethylcycloheptanone, II, 349.
- and Sternbach, L., diterpenes. XXXVIII. Position of the ethylenic linking in *d*-pimaric acid. XL. Isomeric tetrahydroxyabietic acids and their functional transformation products. XLI. Degradation of dihydroxyabietic acid and of oxidodihydroxyabietic acid. XLII. Dehydrogenation of the oxidation products of abietic acid to 7-hydroxy-1-methylphenanthrene and 6-hydroxy-1:5-dimethylnaphthalene; synthesis of 7-hydroxy-1:5- and -1:6-dimethylnaphthalene, II, 137, 183, 184.
- and Wirz, W., triterpenes. LII. Transformation of α -boswellic acid into β -amyrin, II, 137.
- Ryan, A. H. See Fox, G. W.
- Ryan, E. J., ovarian hormone therapy in functional menometrorrhagia, III, 903.
- See also McCullagh, E. P.
- Ryan, J. F., Plucker, J., 3rd, and Amstutz, E. D., esters of 2-furylacetic acid, II, 353.
- Ryan, (Miss) M. A., and Heinrich, H., theory for the passivity of chromium, I, 119.
- Ryan, N. W., and Goldman, L., treatment of Ritter's disease [infantile exfoliative dermatitis] with sulphapyridine, III, 677.
- Ryan, R. W., assessment of physical fitness, III, 340. Medical aspects of the air force, III, 887.
- Rydberg, E., and Ostergaard, E., effect of gonadotropic hormone treatment in amenorrhœa, III, 904.
- Rydeen, J. O. See Clausen, S. W.
- Rydon, H. N. See Evans, E. M.
- Ryerson, C. M. See Nielsen, W. M.
- Ryffel-Neumann, L. See Sachs, G.
- Rygg, G. L., and Harvey, E. M., behaviour of pectic substances and naringin in grapefruit in the field and in storage, III, 941.
- Ryneason, E. H., and Schweiger, L. R., the pituitary, III, 899.
- See also Jenovese, J. F.
- Rypáček, V., adjustment curves as an indication of vitality of plant tissue, III, 607. Detection of oxalic acid idioblasts by reduction of silver nitrate, III, 940.
- Rysselberghe, P. van, interpretation of the thermodynamic properties, conductivity, and diffusion of a typical colloidal electrolyte; laurylsulphonic acid in aqueous solution, I, 24. Derivation of the criteria for irreversible changes, equilibrium, and stability, based on the uncompensated heat, I, 74.
- and Eisenberg, S., activity coefficients in concentrated aqueous solutions of strong electrolytes described by a formula containing the mean ionic diameter as single parameter. I. Theory and application to the alkali chlorides, bromides, and iodides. II. Corrected formulation, I, 26, 214.
- Rytz, W., jun. See Schopfer, W. H.
- Ryu, E., simplification of special staining method of bacteria, III, 541. Differentiation between Gram-positive and Gram-negative organisms without staining, III, 545.
- Ryū, Z., innervation of pupil of dog. I. Extirpation of cervical sympathetic ganglion of one side. II. Destruction of ciliary ganglion of one side, III, 573.
- Ryushi, R. See Yamafuji, K.
- S.
- Saba, G., colour reactions of bile acids. XI. Anthropodeoxycholic acid, III, 743.
- Sabetay, S., pyridine phthalisation, II, 60.
- Sabin, A. B., constitutional barriers to involvement of nervous system by certain viruses, III, 394.
- and Duffy, C. E., nutrition as factor in development of constitutional barriers to involvement of the nervous system of certain viruses, III, 801.
- Sabin, F. R., cellular reactions to a dye-protein with concept of mechanism of antibody formation, III, 269.
- Sacchi, (Signa.) S. See Poggi, R.
- Sacchi, U. See Martini, V.
- Sacharov, I. See Hertzioren, S. D.
- Sachs, A. See Goldberg, S. K., Rothberger, C. J., and Wilhelm, C. M.
- Sachs, E. See Heath, P.
- Sachs, G., and Ryffel-Neumann, L., addition compounds of phthaleins and metallic salts, II, 221.
- Sachs, I. See Gurd, M. R.
- Sachs, M. G., and Liehnitzkaja, I. I., changes of dissociation curve of oxy-hæmoglobin of human foetus during development, III, 18. Affinity to oxygen of hæmolyzed blood of human foetus, III, 18.
- Sachs, R. G., internal conversion in 6.4-hour Cd, I, 141. Nuclear isomerism, I, 144.
- Sack, G., normal fragility of skin capillaries, III, 477. Reticulocyte counts, III, 788.
- Sack, H. See Brüll, L., and Errera, J.
- Sacks, J., iodoacetic acid and anaerobic muscular contraction, III, 107. Radioactive phosphorus as tracer in anaerobic muscular contraction, III, 795.
- Sadikov, A. S. See Lazurievski, G. V.
- Sadikova, N., isolation of cyclic peptides from yeast, II, 194.
- Sadovsky, A., Weber, D., and Wertheimer, E., concentration of vitamin-C in blood during and after pregnancy, III, 145.
- Sadron, C., dynamo-optical properties of pure liquids and colloidal solutions, I, 16.
- Sääf, G. von. See Lüttringhaus, A.
- Saehtling, H. See Zoehner, H.
- Saegusa, H., and Matsumoto, T., total secondary electron emission from polycrystalline nickel, sodium chloride, and potassium chloride, I, 147. Variation in the electrical conductivity of hydrous crystals with temperature, I, 147.
- Saeman, W. See Waddle, H. M.
- Saenz, A., and Canetti, G., attenuation of virulence of a strain of human tubercle bacillus by uninterrupted culture on artificial media, III, 454.
- Säverborn, S., sedimentation and diffusion measurements with pectic materials, I, 358.

- Safarov, A. I., seasonal variations in electrolyte composition of serum and erythrocytes of mammals and birds, III, 97. Effect of castration on mineral content of plasma and erythrocytes (winter season), III, 705.
- Safford, V. See Scott, W. J.
- Safonov, A. P. See Pletenev, S. A.
- Sagal, Z. See Sandroni, D.
- Sagane, R., Kojima, S., Miyamoto, G., and Ikawa, M., new radioactive isotope of masurium, ^{101}Ma , I, 279. Artificial radioactivity induced in zirconium and molybdenum, I, 340.
- Sagastume, C. A., Gaudino, M. L., and Rivera, V., reactions of Wassermann, Kahn, and Auguste, III, 542.
- and Marano, I., anticomplementary power of sera, III, 545.
- Marano, I., and Menendez, B., vitamin-C in certain fruits, III, 515.
- and Oliva, V., preparation of urobilin, III, 504.
- and Rovira, L., cholesterolemia and Kahn and Wassermann reactions, III, 561.
- Sage, B. H., Budenholzer, R. A., and Lacey, W. N., phase equilibria in hydrocarbon systems. XXXII. Methane-*n*-butane system in the gaseous and liquid regions, I, 441.
- Hicks, B. L., and Lacey, W. N., phase equilibria in hydrocarbon systems; methane-*n*-butane system in the two-phase region, I, 412.
- and Lacey, W. N., phase equilibria in hydrocarbon systems; methane-ethane system in the gaseous region, I, 65. Apparatus for study of pressure-volume-temperature relations of liquids and gases, I, 84. Viscosity of hydrocarbon solutions: methane-ethane-crystal oil system, I, 249. Phase equilibria in hydrocarbon systems. XXX. Propane-*n*-pentane system, I, 360.
- Lavender, H. M., and Lacey, W. N., phase equilibria in hydrocarbon systems, I, 322.
- See also Budenholzer, R. A., Morris, W. M., and Nysewander, C. N.
- Sage, C. G. See Glockler, G.
- Sager, O. See Jonesco-Sisesti, M.
- Sagi, J. H. See Turnbull, G. C.
- Sah, P. P. T., azides as reagents for the identification of organic compounds. XV. 2,6-Dinitro-*p*-toluazide as reagent for amines. XVII. *p*-Nitrobenzazide and *p*-nitrophenylcarbimide as reagents for amines, II, 32, 241.
- and Woo, T. F., azides as reagents for the identification of organic compounds. XVI. *m*-Nitrobenzazide as reagent for phenols, II, 32.
- and Yin, W., azides as reagents for the identification of organic compounds. XVIII. *o*-Nitrobenzazide as reagent for phenols, II, 241.
- Saha, B. P., rotational Raman scattering in liquid oxygen, I, 428.
- Saha, K. C., biological value of the proteins of Bengal fish, III, 672.
- and Guha, B. C., nutritional investigations on Bengal fish, III, 817. Available iron in fish, III, 817.
- Saha, K. H., distribution of free and total ascorbic acid in the liver and muscle of Bengal fresh-water fish, III, 235.
- Saha, N. K., β - γ -coupling with ^{76}As , I, 90.
- Sahariya, G. S. See Chaudhry, N. A. and Desai, R. D.
- Sahs, A. L., and Fulton, J. F., somatic and autonomic reflexes in spinal monkeys, III, 716.
- Sahyun, M., effect of subcutaneous injections of crystalline insulin on blood-sugar of fasting rabbits, III, 578.
- See also Altschuler, S. S.
- Sai, E., influence of Röntgen rays on action of different opium alkaloids on blood-sugar level, III, 929.
- Saier, E. See Starkey, W. F.
- Saini, H. See Austin, J. B.
- St. Amant, L. See Turner, C. D.
- St. George, A. V., Kraetzer, A. F., Magee, W., Gibbs, W. S., jun., and Stix, L., treatment of pneumonia with sulphapyridine, III, 520.
- Saito, K., alkaloids of white hellebore. IV. Veratramine, a new alkaloid of white hellebore (*Veratrum grandiflorum*, Loes., fl.), II, 198.
- Saito, M. See Suzue, K.
- Saito, S., biochemistry of unsaponifiable substances. II-IV. Lipin and other changes in muscles after ligation of blood vessels in normal and cholesterol-fed rabbits, III, 795.
- Sakaguchi, K., and Kanbayasi, O., physiological difference between α - and β -butylene glycols, III, 166.
- Ohara, K., and Kobayashi, S., production of β -butylene glycol by fermentation. I, III, 168.
- Sakaguchi, R., urinary excretion of histidine, III, 910.
- Sakai, W., carbamide. I. Hygroscopicity of soluble substances; vapour pressures of saturated salt solutions. II. Vapour pressures of saturated solutions. III. Hygroscopicity of carbamide and inorganic salts, I, 354, 407, 415.
- Sakata, S., connexion between the meson decay and the β -decay, I, 427.
- and Tanikawa, Y., spontaneous disintegration of the neutral mesotron (neutretto), I, 187.
- Sakato, Y., constituents of tea. I. Arginine from giokuro, III, 832.
- Sako, Y. See Lyons, W. R.
- Saksena, B. D., Raman and infra-red spectra of cyclopropane, I, 146. Raman spectrum and molecular association in formamide, I, 195. Raman effect and crystal symmetry, I, 282. Raman spectrum of glycerol, I, 283. Raman and infra-red spectra of α -quartz, I, 402.
- Sakula, J., sulphapyridine in Pfeiffer's bacillus meningitis, III, 521.
- Sakurai, K. See Sugawara, S.
- Sakurai, T. See Ishikawa, S.
- Sakurai, Y., Inagaki, T., and Omori, S., colorimetric determination of vitamin-B₁, III, 673.
- and Omori, S., sucrose diet. II., III, 750.
- Sal, Z., chemotherapy of sulphanilamide for gonorrhoea, III, 245.
- Salágeanu, N., limit of assimilation by chlorophyll at feeble light intensity, III, 270. Equilibrium between chlorophyll assimilation and respiration in leaves, III, 942.
- Salah-ud-din. See Siddiqui, R. H.
- Salaman, M. H. See Hopwood, F. L.
- Salaman, R. N., and Wortley, W. R. S., potential hosts of potato viruses in garden and field, III, 272.
- Saland, G., Klein, C., Zurorow, H., Gootnick, A., and Katz, A., peripheral vascular diseases, III, 633.
- Salant, E. O., and Horvath, W. J., absorption of slow neutrons by chlorine, I, 383.
- Salemi, B. See Indovina, R.
- Sales, E. K. See Sholl, L. B.
- Salini, (Signa), A. See Jacini, G.
- Salk, M. R., and Weinstein, R. E., effects of acutely raised intracranial pressure on diuresis in dog, III, 138.
- Salkind, J. S., and Fundiler, B. M., preparation of substituted diphenyldiacetylenes, II, 160.
- and Labuzov, S. M., reaction between dimagnesium acetylenyl dibromide and carbonyl compounds, II, 8.
- and Momarenko, M. E., action of chlorine on carbazole, II, 54.
- Salmi, E. J., ether-like compounds. VI. Constitutive factors in the acid hydrolysis of esters of aliphatic carboxylic acids, II, 64.
- Salmon, A. A. See Salmon, U. J.
- Salmon, M. R., and Powell, G., synthesis of 5:6-dimethylglucose, II, 67.
- Salmon, U. J., deoxycorticosterone acetate is oestrogenic to the human female, III, 129.
- and Salmon, A. A., effect of pregnenolone on genital tract of immature female rats, III, 737.
- Walter, R. I., and Geist, S. H., prolonged therapeutic effect of subcutaneously implanted crystals of ovarian hormone in women, III, 129. Inhibitory effect of implanted oestrogenic hormone crystals on postmenopause and castration hypophysis of women, III, 581.
- See also Geist, S. H., and Walter, R. I.
- Salmond, M. D. See Cochrane, R. G.
- Salomon, H. See Karrer, P.
- Salomon, K., copper catalysis; properties of copper protoporphyrin; copper proteid of blood serum; manometric micro-determination of copper, III, 779.
- Salter, W. T., fluctuations in body-iodine, III, 725.
- See also Brues, A. M., Lerman, J., Muus, J., and Rawson, R. W.
- Saltzman, M. See Hollander, F., and Penner, A.
- Saltzstein, H. C., Farbman, A. A., and Sandweiss, D. J., sex incidence of peptic ulcer in children, III, 907.
- See also Farbman, A. A., Friedman, M. H. F., and Sandweiss, D. J.
- Salvesen, H. A., and Kobro, M., symptomatic spruce, III, 236.
- Samaan, A. See Cerguza, S.
- Samans, C. H., process of precipitation from solid solution. I. Crystallographic mechanism for the Al-Cu alloys, I, 318.
- Samaras, A. See Binet, L.
- Samaras, K., action of cold on carbohydrate metabolism, III, 327.
- Sâmboteanu, S. See Enachescu, M.
- Sambursky, S., and Wolfsohn, G., fluorescence and absorption spectra of anthracene and phenanthrene in solutions, I, 192.
- Sames, N. R., and Pask, E. A., ether convulsions, III, 925.
- Sammartino, R., and Arenas, N., effect of ovarian hormones on genital tract of normal, castrated, and hypophysectomised bitches, III, 129.
- See also Arenas, N.
- Sammis, F. E., heterophile factor in ragweed pollen, III, 938.
- Samchvalov, G. K., importance of sodium in life of plants, III, 361.

- Samochevalova, G. V., effect of vitamin-D on growth and propagation of *Gambusia aff. holbrooki*, III, 430.
- Sampath, S., modified form of aceto-carmine, III, 786.
- Sampey, J. R., Fawcett, F. S., and Morehead, B. A., side-chain bromination, II, 301.
- Sampey, T. R., *s-tri-p-tolylbenzene*, II, 369.
- Sample, J. H. See Marvel, C. S.
- Sampson, E., structural relations of chromite deposits, I, 422.
See also White, D. E.
- Sampson, H. L. See Gardner, L. U.
- Sampson, M. B. See Allen, A. J.
- Sampson, W. L. See Fieser, L. F., Molitor, H., Reedman, E. J., and Tishler, M.
- Sams, W. M., occupational dermatitis due to mint, III, 529.
- Samson, M. See Gershon-Cohen, J.
- Samuel, L. See Roche, J.
- Samuel, W. S., jun. See Hansen, L. A.
- Samuels, L. T., Ritz, N. D., and Poyet, E. B., effect of drugs on vitamin-C excretion, III, 528.
See also Szego, C. M.
- Samuelsen, E. See Sørensen, N. A.
- Samuelson, O., base-exchange media in analytical chemistry. II. III. Determination of sulphate in presence of various cations, I, 38, 444.
- Samurskaja, K. A. See Juriev, J. K.
- Samwick, A. A. See Morrison, M.
- San-Tsiang, T., groups of protons emitted during the bombardment of hydrogenated substances by polonium α -rays. I. and II., I, 140, 241.
See also Curie, (Mme.) I.
- Sand, A. See Löwenstein, O.
- Sand, K. See Okkels, H.
- Sandberg, C. R. See Rosenbaum, E. J.
- Sandberg, M., Perla, D., and Holly, O. M., metabolism of nitrogen, sulphur, and glutathione in thymectomised albino rats, III, 408.
See also Perla, D.
- Sander, F., and Sander, M., determination of blood groups by sedimentation, III, 10.
- Sander, J. F., and Camp, C. D., chromium poisoning in infancy, III, 253.
- Sander, M. See Sander, F.
- Sander, O. A., medical control of silicosis in foundries, III, 930.
- Sanders, A., experimental localised auricular necrosis, III, 474.
See also Brams, W. A.
- Sanders, A. G. See Ebert, R. H.
- Sanders, A. P. See Mack, P. B.
- Sanders, P. A. See Lauer, W. M.
- Sanderson, J. L. See Goudsmit, S.
- Sandground, J. H. See Bonne, C.
- Sandiford, I. See Kenyon, A. T.
- Sandin, R. B., McClure, F. T., and Irwin, F., nitration of diphenyliodonium nitrate, II, 59.
- Sandler, L. See Bergmann, E., and Farakas, L.
- Sando, C. E. See Wheeler, D. H.
- Sandor, G., purification of anti-diphtheria toxin by proteolytic digestion; coagulation and selective adsorption of inert proteins in the digested serum, III, 263. Purification of antitoxins by [proteolytic] digestion, III, 612.
and Tabone, J., acetylation of serum-proteins by keten. II. Determination of fixed acetylated radicals; unstable volatile acids of serum, III, 380.
See also Perez, J. J.
- Sandroni, D., and Sagal, Z., reasons for survival of the Ewald-Boas test meal, III, 663.
- Sandström, A. E., changes in internal resistance of selenium barrier-layer cells caused by exposure to light, I, 83. Barrier-layer [photo]cells in microphotometry, I, 420.
- Sandweiss, D. J., Saltzstein, H. C., and Farbman, A. A., relation of sex hormones to peptic ulcer, III, 133.
See also Farbman, A. A., Friedman, M. H. F., and Saltzstein, H. C.
- Sanes, S., anomalous drainage of pulmonary veins into coronary sinus, III, 698.
- Sanford, H. N. See Miller, E. M.
- Sanford, T. D. See Jukes, T. H.
- Sanfourche, A. A., and Krapivine, A., aluminium silicofluoride: preparation in the solid state and properties, I, 127.
- Sanger, E. B., and Gilliland, W. L., severe carbon monoxide poisoning, III, 295.
- Sanin, P. I., Tschelkar [Ural] caustobiolith, I, 380.
- Sanin, P. S. See Petrov, A. D.
- Sankaran, G. See Lal, R. B., and Napier, L. E.
- Sannella, L. S., effect of testicular extract on distribution and absorption of subcutaneous saline solution, III, 560.
- Sanné, C., Raman spectra of cholesterol and cholic acid, I, 244.
and Poremski, V., constitution of peptides. II. Raman spectra and structure of amides, I, 96.
- Sano, I., dialysis of platinum carbonyl sol, I, 357. Influence of temperature on formation of platinum carbonyl sol, I, 357. Catalytic decomposition of oxalic acid by colloidal platinum, I, 367. Effect of gases on catalytic decomposition of oxalic acid by colloidal platinum, I, 367.
- Sansone, B. See Caronna, G.
- Sant, G., detection of prontosil preparations, III, 329.
- Santa, N., and Veil, C., effect of cortin on pigment cell; possibility of its use as method of assay, III, 305.
See also Giroud, A.
- Santavy, F., glutathione content of tissues following splenectomy in dog and rabbit, III, 588.
- Santi, R., site of action of ergometrine. I. Antagonism to adrenaline, III, 61. Pharmacology of adrenaline-like substances. II. Experiments on isolated rabbit uterus, III, 759.
- Santo, E., severe disease of spinal cord after treatment of gonorrhoea with uleron, III, 522.
- Santonè, P., structural changes of human jaw with age, III, 4.
- Santoro, A. S. See Comolli, E. P.
- Santos, A. C. See Abcede, J. B.
- Santos, M. D. de S. See Wataghin, G.
- Santos Ruiz, A., and Portillo, R., influence of protective colloids on the transition point of adsorption indicators. I. Iodides and chlorides, I, 419.
- Saphir, O., and Appel, M., regression of primary Brown-Pearce testicular carcinoma and metastases following intracutaneous transplantation with homologous tumour, III, 423.
- Saphir, W., xerostomia successfully treated with nicotinic acid, III, 914.
- Sapiro, R. H. See Raistrick, B.
- Saposhnikov, D. I., synthetic action of invertase in non-aqueous media, III, 449.
- Sappington, S. W., and Favorite, G. O., sulphanilamide and meningitis, III, 437.
- Sarason, E. L., cellular reaction to intraperitoneally injected blood, III, 559.
- Sarett, H. P., Perlzweig, W. A., and Levy, E. D., synthesis and excretion of trigonelline, II, 383.
- Sargent, W., hyperventilation syndrome, III, 389.
- Sargent, G. B. See Avery, G. S., jun.
- Sargent, M. C. See Sumner, F. B.
- Saric, R. See Aubertin, E.
- Sarin, J. L., and Sehgal, R. L., chemical and physical properties of water caltrop starch, III, 695.
- Saris, B. F. See Keesom, W. H.
- Sarkander, H. See Thaddea, S.
- Sarkar, S. S., blood groups of Angami Nagas, III, 379.
- Sarkisov, E. S., effect of nature of the solvent on process of electrocrystallisation of silver, I, 34.
- Sarma, P. S., and Sreenivasaya, M., growth-promoting factors in jowar, III, 426.
- Sarmai, E. See Gömöri, P.
- Sarre, H., experimental production of diffuse glomerulonephritis, III, 223.
and Wirtz, E., rate and site of "nephrotoxin" fixation in experimental glomerular nephritis, III, 666.
- Sartor, M. See De Milt, C.
- Sartori, A., alkaline reserve in dogs anaesthetised with cyclopropane, III, 602.
- Sartori, G., constants of the equation of state of Beattie and Bridgeman for water vapour, I, 154.
and Giacomello, G., polarographic researches in a non-aqueous medium, I, 362.
- Sartory, A., and Meyer, Jacques, effect of vitamin-C on pathological effects of intense cold on man, III, 515.
- Meyer, Jacques, and Tawfik, Z., Mucoraceae, *Abidia aegyptiacum*, n. sp., alcoholic ferment of the Bouza of Egypt, III, 351.
- Sarzana, G. See Zummo, C.
- Sas, L. See Aszódi, Z.
- Sasagawa, T. See Kuwada, S.
- Sasaki, M., effects of synthetic androgens and oestrogens on pituitary, prostate, and seminal vesicles in castrated rat, III, 902.
- Sasaki, N., and Mabuchi, O., para-ortho composition of hydrogen gas produced from hydrogen atoms. II., I, 418.
- Sasaki, T., and Ueda, H., synthesis of 4-aminohydrocarbostyryl and its derivatives, II, 107.
- Sasanski, J. See Mereshinski, M.
- Saslavski, A. I., and Ravdin, J. A., simultaneous solubility of aluminium, sodium, potassium, and ferric nitrates in water in presence of nitric acid. III., I, 74.
- Saslow, G. See Peters, E.
- Sassaman, W. A. See Briggs, T. R.
- Sassier, M. See Lian, C.
- Sastri, M. V. C. See Farquharson, J.
- Sastri, V. D. N. See Rao, P. S.
- Sastry, M. G., structure of the 3, 0 band, λ 2569, of OD, I, 428.
See also Rao, K. R.
- Sata, N., and Harisaki, Y., effect of ultrasonic waves on colloidal phenomena. VII. Effect on sucrose solutions, I, 368.
and Ito, S., irregular series of colloidal solutions by electrolytes. II. Mastie sol, I, 411.

- Sata, N., and Naruse, N., effect of ultrasonic waves on colloid phenomena. V. Influence on thixotropy. II. Thixotropic systems of ferric hydroxide, I, 111.
- Sati, M. H. See Kirk, R.
- Sato, K. See Sumi, M.
- Satō, M., energy states of the valency electrons in metals. I. II. Anomalies of zinc and its electronic structure. I. 7. Emission and absorption of X-rays in zinc and zinc oxide. I. 4. Electrode potential of zinc and hydrogen and mechanism of catalytic action of metal surface (revisions), I, 149, 184, 403.
- and Maruyama, K., electrode potential of crystal surfaces of metals. I. Zinc, I, 257.
- Sato, S., Arakawa's reaction and content of methylglyoxal-like substance of human milk, III, 515.
- and Kodama, T., intranasal immunisation with staphylococcal toxoid, III, 265.
- See also Takamatsu, A.
- Satoh, S., and Sogabe, T., specific heats of solid aromatic acids and their ammonium salts and the atomic heat of nitrogen, I, 201, 352. Specific heats of aliphatic acids and their ammonium salts, and atomic heat of nitrogen, I, 352. Heat of dissociation and specific heats of ammonium phosphates and atomic heat of nitrogen, I, 390. Specific heats of copper nitride, niobium nitride, and sodium azide, and atomic heat of nitrogen, I, 405.
- Satoh, T., biochemistry of carbohydrates. LVII. Sclera mucoid and its prosthetic group, III, 911.
- Satomi, M. See Kondo, H.
- Satta, E., nature of Vi antigen, III, 771. Preparation of antityphoid serum rich in Vi antibody, III, 772. Growth of *Schizomycetes* in presence of formaldehyde, III, 773.
- Sattler, D. G., vago-neurohypophysial pressor reflex, III, 709.
- Sauary, P. See Escourrou, R.
- Saucier, J., and Stewart, O. W., potassium chlorate in treatment of poliomyelitis, III, 247.
- Sauer, F., rôle of urea in ruminant metabolism, III, 510.
- Sauer, J. A., magnetic energy constants of dipolar lattices, I, 149.
- Sauer, M. A., nerve fibres in metaplastic epithelium of vitamin-A-deficient rats, III, 427.
- Sauerbruch, F., [removal of pancreatic adenoma for] paroxysmal hypoglycæmia, III, 898.
- Saunders, B. See Pincus, G.
- Saunders, B. C., and Mann, P. J. G., peroxidase action. II. Oxidation of *p*-toluidine, II, 283.
- Saunders, F. See Dorfman, A., and Koser, S. A.
- Saunderson, J. L. See Goudsmit, S.
- Sauter, C. G. See Davis, T. W.
- Sauvenier, H., M and N spectra of palladium and silver; N and O spectra of gold in the region 90 to 200 Å, I, 184.
- Savage, B. See Card, W. I.
- Savage, G. M., and Ordal, Z. J., modified Kendall tube for purifying nitrogen, I, 274.
- Savage, W., canned foods in relation to health, III, 230.
- Savelli, F., Italian bentonite, I, 274.
- Savelli, R., mechanism of mutual stimulation of pollen grains germinating in groups, III, 693. Hormonal action of embryonic tissue of *Vicia faba*, III, 695.
- and Caruso, C., mutual stimulation in the germination of pollen grains of *Nicotiana*, III, 363.
- Saviano, M., influence of work on skin resistance, III, 341.
- Savinova, V. K. See Ivanov, K. I.
- Savitsky, N. See Bender, M. B.
- Savkar, G. S., Bokil, K. V., and Nargund, K. S., condensation of *p*-anisylsuccinic anhydride with the methyl ethers of pyrocatechol, resorcinol, and quinol, II, 132.
- Savoar, S. R. See Lewthwaite, R.
- Savtschenko, A. J. See Mizutsch, K. G.
- Sawai, I., and Inoue, S., specific gravity of ternary glasses $\text{CaO-Na}_2\text{O-SiO}_2$ at high temperatures. VI.—VIII., I, 106.
- Sawires, Z. See Morton, R. A.
- Sawyer, C. H., standardised technique for safranin O, III, 281.
- Sawyer, R. A., Waggoner, R. W., and Erickson, A. A., statistical study of lead in human blood and urine, III, 668.
- Sawyer, S. D. See Blatherwick, N. R.
- Saxton, B., and Darken, L. S., ionisation constants of weak acids at 25° from conductance measurements; method of extrapolating data, I, 256.
- Saxton, H. L. See Pielemeier, W. H.
- Sayama, S., relation between thyroid and autonomic nervous system. III. Influence of potassium iodide, di-iodotyrosine, and thyroxine on blood pressure, pulse and respiration rate, and pharmacodynamic reaction of rabbits. IV. Influence of potassium iodide and organic compounds containing iodine, apparently related to the hormone of the thyroid gland, on the parasympatheticus of rabbits; experiments with prolonged large doses. V. Influence of potassium iodide, di-iodotyrosine, thyroxine, and various thyroid extracts on the sympatheticus of rabbits; experiments with large doses, III, 122.
- Sayers, M. R. See Greenburg, L.
- Sayers, R. R. See Crosson, J. W., Fairhall, L. T., and Schrenk, H. H.
- Sborgi, U., geochemical significance of the inert gases in natural gases and especially in volcanic gases, I, 236.
- Scaccini, A., chromosomes of some birds, III, 280.
- Scadding, J. G., and Wood, P., systolic clicks due to pneumothorax, III, 99.
- Scagliarini, G., potentiometric determination of sulphides and of alkali ferri-cyanides, I, 231.
- Scala, N. P. See Spiegel, E. A.
- Scanlan, J. T., and Swern, D., action of lead tetra-acetate on hydroxylated fatty acids and related compounds. I. Hydroxylated oleic acid, ethyl oleate, and oleyl alcohol. II. Hydroxylated ricinoleic acid and castor oil, II, 363.
- Scapaticci, R., relationship between endocrine functions of pancreas and thymus, III, 304.
- Scaramelli, G., determination of the regulating capacity in mineral waters, I, 237.
- Scarborough, H., nutritional deficiency of vitamin-K in man, III, 790.
- Scarborough, H., and Thompson, Y. C., stored blood. III. Oxygen capacity, III, 839.
- See also Crosbie, A., and Horne, G.
- Scarisbrick, R. See Hill, R.
- Scarlett, E. P., angina pectoris, III, 191.
- Scarlini, F. See Addarii, F.
- Scarpa, O., electrochemical potentials and Volta effect. I, I, 75.
- Scatchard, G., calculation of composition of phases in equilibrium, I, 441.
- Wood, S. E., and Mochel, J. M., vapour-liquid equilibrium. IV. Carbon tetrachloride-cyclohexane mixtures. V. Carbon tetrachloride-benzene mixtures, I, 18, 256.
- Scatena, R., ptyalin in saliva of new-born and lactating infants, III, 308.
- Scattergood, A., and Pascu, E., glucofuranosides and thioglucofuranosides. VII. Crystalline alkylfuranosides and dimethyl acetal of *d*-mannose, II, 205.
- Schaad, R. E., and Ipatiev, V. N., catalytic hydration of acetylene and alkylacetylenes, II, 62.
- See also Ipatiev, V. N.
- Schaaf, E. See Freudenberg, K.
- Schaafs, W., calculation of the molecular radius of organic liquids from velocity of sound and density, I, 65. Relationships between velocity of sound in, and constitution of, organic compounds, I, 104. Calculation of molecular radius from the molecular volume and velocity of sound, I, 288.
- Schabalin, K., absorption of gases by a drop of liquid, I, 389.
- Schabarin, S. K. See Plaksin, I. N., and Pschenitzin, N. K.
- Schachman, H. K. See Hauser, E. A.
- Schachov, A. S., polarographic method of determining lead and tin in potassium fluoroxyniobate and niobium, I, 269.
- Schachter, R. J., stable adrenal cortical extract, III, 305.
- and Huntington, J., use of orally administered desiccated thyroid in production of traumatic shock, III, 725.
- Schachuniantz, R. M., comparative analysis of muscles of the hind extremity of sheep, III, 296.
- Schade, A. L. See Wallerstein, J. S.
- Schaeben, L. See Antropoff, A. von.
- Schächter, M. See Radovici, A.
- Schäfer, D. See Nell, W.
- Schaefer, H., and Stachowiak, dielectric behaviour of colloidal systems, III, 259.
- Schäfer, K., theory of rotational transformations, I, 11.
- See also Karweil, J.
- Schaefer, R. L., and Strickroot, F. L., endocrine dwarfism, III, 495.
- Schaefer, W., separation of lipin, polysaccharide, and protein antibodies from tuberculous serum by means of specific inhibitory reactions, III, 613.
- Schaeffer, A. E. See Moxon, A. L.
- Schaffer, N. K., and Ziegler, W. M., isolation of glutathione from thymus, III, 209.
- Schaffer, P. S. See Kurtz, F. E.
- Schaffranovski, I. I., crystallography of diamonds of the Brazilian type, I, 311.
- See also Grigoriev, D. P.
- Schaikind, S. P., effect of the "basic" electrolyte on polarographic wave of cadmium and lead, I, 390.
- Schalaeva, T. V. See Lichoscharstov, M. V.
- Schalaikin, F. P., binding of sulphurous acid by glucose, I, 325.

- Schales, O., comparative examination of liver extracts, III, 909.
and Reimer, L., anti-anæmic substance of liver, III, 91.
See also Barkan, G.
- Schalit, S. S. See Miljutin, G. A.
- Schalm, L., reaction with sulphosalicylic acid in albuminuria, III, 41.
- Schalsha-Ehrenfeld, M. von. See Hüchel, W.
- Schamovski, L. M., absorption of light by ionic crystals in the ultra-violet, I, 242.
- Schamrai, E. F., determination of dehydroascorbic acid, III, 515.
- Schamschurin, A. A., preparation of methyl chloride from methyl sulphate and aluminium chloride, II, 147.
- Schantz, E. J., Elvehjem, C. A., and Hart, E. B., comparative nutritive value of butter fat and certain vegetable oils, III, 817.
and Krewson, C. F., relation of fat to utilisation of lactose in milk, III, 658.
See also Krewson, C. F.
- Schaposchnikov, I. G., and Leontovitch, M. A., absorption and dispersion of sound in a solution of a weak electrolyte, I, 249.
- Schardakov, V. S., apparatus for gasometric determination of catalase in plant tissues, III, 71. Peroxidase reaction as an index of viability of plant pollen, III, 608.
- Schartau, O. See Hartmann, M.
- Schattenstein, A. I., definition of "acid" and "base," I, 73.
- Schatzki, R. See Cope, O.
- Schaum, K., interferometry. IV. Detection of ageing phenomena in melts, I, 102. Polymorphism of benzophenone, I, 102. Silver in the photographic process, I, 123. R. E. Liesegang as photochemist, I, 135. Allotropy in phosphorus and sulphur, I, 313.
- Schaut, G. G., gastro-intestinal derangement during drought; contaminants of vegetable origin, III, 761.
- Schechter, A., and Sirkina, K., polymerisation process in electrical discharges, I, 327.
- Schechter, M. S., and Haller, H. L., identity of obaculactone, evodin, and dictamnolactone with limonin, II, 284.
- Schechtman, A. M., anus formation in a frog egg, III, 87.
and Smale, L. E., mechanism of gastrulation in frog's egg, III, 278.
See also Margen, S.
- Scheef, S., rupture of mycotic aneurysm of ductus Botalli and roentgenological diagnosis of dilated duct in suckling, III, 885.
- Scheel, K., lipofuscin in liver, III, 312.
- Scheeline, H. W. See Gilliland, E. R.
- Scheer, A. See Hölte, R.
- Scheer, J. van der, and Wyckoff, R. W. G., electrophoretic study of tetanus antitoxin sera, III, 613. Electrophoretic analysis of immune sera, III, 774.
See also Landsteiner, K., and Moore, D. H.
- Scheer, K., evaporated milk in infant feeding, III, 907.
- Scheer, P., action of nicotine on leucocyte count, III, 923.
- Scheff-Pfeifer, I. See Mansfeld, G.
- Scheffer, F. E. C. See Leendertse, J. J.
- Scheffers, H., vapour-pressure formula for high temperatures, I, 17.
- Scheffler, W. A. H. See Bacon, H. E.
- Scheffan, L. See Ferguson, G. E.
- Scheiber, W. J. See Patnode, W.
- Scheid, W., cerebrospinal fluid after cisternal and lumbar puncture, III, 637.
- Scheie, H. G., site of disturbance in Adie's syndrome, III, 892.
- Scheiffel, C. H., chronic regional enteritis occurring in three siblings, III, 812.
and Higgins, G. M., effect of partial hepatectomy on action of barbiturates and a phenylurea derivative, III, 863.
- Schein, M., and Gill, P. S., burst frequency as a function of energy, I, 190.
Jesse, W. P., and Wollan, E. O., intensity and rate of production of mesotrons in the stratosphere, I, 308.
and Wilson, V. C., mesotron production in the atmosphere, I, 190.
- Scheinberg, H. See Edsall, J. T.
- Scheinkman, E. A., and Tschagovetz, R. V., binding of water by certain colloids, III, 685.
- Scheka, I. A. See Jankelevitch, Z. A., and Plotnikov, V. A.
- Schellenberg, W., treatment of syphilis and gonorrhoea in women, III, 60.
- Schemensky, W., and Schulz, W., pernicious anaemia and ulcerative colitis [treated with large intestine extracts], III, 220.
- Scheminzy, F. See Köllensperger, F. K.
- Schemjakin, F. M., and Kuperman, M. E., viscosity of sols of lyophilic colloids. IV. Cellulose-cuprammonium sols. Effect of salts on viscosity of sols of lyophilic colloids. V., I, 411, 439.
and Michalev, P. F., theory of Liesegang's rings, I, 162.
See also Michalev, P. F.
- Schemjakin, M. M., aldehyde-acids and aldo-enol-lactones. IV. Specific transformation of aldehyde-acids and γ -aldo-enol-lactones in alkali medium, II, 87.
and Trachtenberg, D. M., ketones. I. Condensation of ketones with cyanoacetic acid, II, 85.
- Schemm, F. R., pernicious anaemia family, III, 282.
- Schenck, G., and Graf, H., bitter constituents of the sap of *Lactuca virosa*. VIII. Relation between content of bitter substances and composition of the soil, III, 369.
- Schenck, L. M., and Bailey, J. R., nitrogen compounds in petroleum distillates. XVII. Use of multiple acid extraction in isolation of 2:3:4-trimethyl-8-n-propylquinoline. XVIII. Isolation, ozonisation, and synthesis of 2:4-dimethyl-8-sec-butylquinoline, II, 24, 357.
- Schenck, M., bile acids. LVII., II, 221.
and Reschke, J., behaviour of oximino- and isonitro-compounds under the conditions of Van Slyke's determination of amino-nitrogen, II, 346.
and Wolf, L., reaction of hydroxamic acids, II, 279.
- Schenck, R., chemical elementary processes in light emission of sulphide phosphors, I, 282. Susceptibility of mixed crystals to chemical attack, I, 407.
and Keuth, H., active intermediate states in the combination of oxides and their thermodynamic detection, I, 328. Displacement of chemical equilibrium as an aid to investigating the copper rust reaction, I, 328.
- Schenck, R., and Meyer, Kurt, carbide studies by the methane-carbonisation method. IV. Double carbides, I, 217.
Meyer, Kurt, and Mayer, Kurt, carbide studies by the methane-carbonisation method. III. [System Fe-Mn-C], I, 117.
- Schenck, R. T. E. See Kharasch, M. S.
- Schenken, J. R., Stasney, J., and Hall, W. K., anti-anæmic principle in human liver in carcinoma of stomach and caecum, III, 787.
See also Burns, E. L.
- Schepens, C. See Hambresin, L.
- Scheremeteva, T. V. See Liubomilov, V. I.
- Scherff, D., and Weissberg, J., hypertonic glucose solution in angina pectoris, III, 292.
See also Boyd, L. J.
- Scherff, I. See Thiele, W.
- Schermerhorn, L. J., treatment of pneumonia in infants and children, III, 520.
- Schernhardt, J., effect of injections of fresh and hæmolyzed blood on red cell formation, III, 6.
- Scherp, H. W., Bradford, W. L., and Wold, M., protective value of immune rabbit serum and its globulin fraction against experimental murine infection with *Hæmophilus pertussis*, III, 264.
- Scherrer, I., colour reactions of benzaldehyde with sterols and steroids imposed on concentrated sulphuric acid, II, 14.
- Scherrer, W. See Stoll, M.
- Scherres, H. See Uhse, W.
- Scherzer, H. R., and Goedrich, P., germicidal efficiency of iodo-cholate, III, 758.
- Scherzer, O., the electron in the radiation field. II., I, 89. Theoretical obtainable resolving power of the electron microscope, I, 235.
- Schestakov, V. E., Smirnova, A. D., Popova, Z. N., and Kazanski, V. P., temperature-hardening of winter wheats and accumulation of carbohydrates in the light stage of development, III, 364.
- Scheuer, L. A. See Craig, J. D.
- Scheunert, A., and Petzold, R., relation of distemper [in dogs] to vitamin deficiency, III, 146.
and Schieblisch, M., vitamin-B content of wood-sugar yeast, III, 322.
Wagner, K. H., Fink, H., and Krebs, J., synthesis of vitamin-B₁ and -B₂ (complex) by *Torula utilis*, III, 322.
- Scheurer, O., and Hagenmeyer, H. O., blood sedimentation rate and ingestion of food, III, 184.
- Scheuring, H., examination of Bordet's proserozyme theory [of blood coagulation], III, 185.
- Schewe, J. See Schmahl, N. G.
- Schick, H. See Rietschel, H.
- Schicktan, S. T., Steele, W. I., and Blaisdell, A. C., analysis of mixtures of aliphatic acids; simultaneous qualitative and approximate quantitative determinations, II, 319.
- Schieblisch, M. See Scheunert, A.
- Schiff, L., Felson, H., Graff, J., and Meyer, B., effect of oestrogenic hormone on gastric acidity, III, 34.
and Goodman, S., desiccated hog's stomach extract (ventriculin) in treatment of atrophic gastritis, III, 499.
and Stevens, R. J., blood-urea-nitrogen following hæmatemesis, III, 310.

- Schiff, L., Stevens, R. J., Goodman, S., and Garber, E. S., oral administration of citrated blood in man; effects on blood-urea-nitrogen, III, 286.
See also Felson, H., and Stevens, R. J.
- Schiff, L. L., scattering of light by liquid helium, I, 288. Field theories for charged particles of arbitrary spin, I, 309.
- See also Morrison, P.
- Schifferin, M. J., and Nasset, E. S., response of jejunum and ileum to food and enterocrinin, III, 415.
- Schiffmann, A. See Winkleman, L.
- Schill, F. See Meerwein, H.
- Schiller, A. E., natural colour photography of skin, III, 696.
- Schiller, H. A. See Daro, A. F.
- Schiller, S. See Smith, O. W.
- Schilling, E., corticosterone and Addison's disease, III, 410.
- Schilling, V., shifts "to the right" and "to the left" of the white blood count, III, 183.
- Schilov, E., and Kaniaev, N., bromine ion as brominating agent, I, 166.
- Schilov, E. A., Solodushchenkov, S. N., and Kurakin, A. N., kinetics of addition of hypochlorous acid to double linkings. V. Formation of α -dichloroethane from ethylene and hypochlorous acid at low hydrochloric acid concentrations, I, 260.
- Schimert, G., jun. See Dietrich, S.
- Schindel, L., determination of nicotine acid in urine, III, 419.
- Schindler, R., therapy with high-speed electrons, III, 825. Fatalities in gastroscopy, III, 851.
- and Baxmeier, R. L., mucosal changes accompanying gastric ulcer, III, 414.
- Kirsner, J. B., and Palmer, W. L., liver and iron in atrophic gastritis, III, 414.
- and Morales, F. H., gastroscopic inspection of pylorus, III, 740.
- and Murphy, H. M., symptomatology of chronic atrophic gastritis, III, 499.
- Schinz, H. See Ruzicka, L.
- Schipper, F. See Kohl, H.
- Schirm, M., determination of morphine in urine, III, 587.
- Schirmer, F. B. See Laubengayer, A. W.
- Schiro, H. S. See Vilter, R. W.
- Schirobokov, M. J., mechanism of cobalt magnetisation, I, 153.
- Schirrmeister, S., effect of adrenal cortex extract on uterus and vagina of infantile mice, III, 897.
- Schischakov, N. A., crystals of quartz glass. I, I, 13. Mosaic blocks of crystalline quartz, I, 13.
- See also Dankov, P. D., and Toropov, N. A.
- Schischkin, N. V., anhydrous analogue of iron alums, I, 444.
- Schischlovski, A. A., lumino-microscopic methods, I, 301.
- See also Gordon, B. E.
- Schischokin, V. P., effect of factors on the relation between chemical composition and solubility (m.p.), I, 408. Geometrical transformations of components of binary and ternary systems, involving formation of compounds, I, 413.
- Schittenhelm, A., indications for radiotherapy of pituitary, thyroid, and adrenal gland, III, 493.
- Schjånberg, E., ultra-violet absorption [spectra] of chlorinated quinones and quinols, I, 429.
- Schjött-Rivers, E., hyperemesis gravidarum, III, 905.
- Schkabara, M. N., zeolites of the Crimea, I, 333.
- and Sturm, E. A., datolite from volcanic group of the Karadag in the Crimea, I, 86.
- Schkloven, N. See Abramson, D. I.
- Schlager, J. See Späth, E.
- Schlaginhaufen, O., skulls from north-western Siam, III, 836.
- Schlechtweg, H., permalloy problem, I, 206. Electronic theory rule on influence of addition elements on polymorphism of iron, I, 207.
- Schlegel, H. See Höltje, R.
- Schleicher, A., new assessments of analytical methods, I, 172.
- Schleicher, E. M. See Limarzi, L. R.
- Schleicher, I. See Matthes, K.
- Schleisinger, E. R. See Caffey, J.
- Schlenk, F., nicotinamide-nucleoside, III, 536.
- Högberg, B., and Tingstam, S., constitution of coodehydrogenase. II, III, 70.
- Lindberg, B., and Tingstam, S., determination of cocarboxylase in blood, III, 883.
- and Vowles, R. B., determination of cozymase by fermentation in apozymase system, III, 866.
- Vowles, R. B., and Euler, H. von, aneurin monophosphate, III, 857.
- See also Ahlström, L., and Euler, H. von.
- Schlesinger, A., granulation of red cells in malaria after injection of milk, III, 6.
- Schlesinger, B., venous drainage of the brain, III, 300.
- Schlesinger, M. J., relation of anatomic pattern to pathologic conditions of coronary arteries, III, 794.
- See also Blumgart, H. L.
- Schlesinger, N. S., treatment of myasthenia gravis, III, 390.
- Schlicke, C. P., blood of newborn rats after oral administration to mother of normal and abnormal human gastric juice, III, 787. Effect of human gastric juice on reticulocytes of albino rats, III, 838.
- and Barga, J. A., "clubbed fingers" and ulcerative colitis, III, 416.
- Schliephake, biological problems of high-frequency therapy, III, 529.
- Schlittler, E. See Hartmann, M.
- Schlomka, G., and Radermacher, G., electrocardiographic changes in up-right position, III, 190.
- Reindell, H., and Malamani, V., electrocardiographic studies on normal subjects after exercise, III, 190.
- and Rössel, W., respiratory arrhythmia in the adipose, III, 17.
- Schlossberger, H., and Bär, F., action of sulphonamide compounds in mice infected with streptococci and lymphogranuloma inguinale, III, 436.
- Schlossmann, H. See Blaschko, H.
- Schlotthauer, C. F., causes of sterility in cows, III, 211.
- Schlubach, H. H., and Bandmann, C., fructose anhydrides. XXII. Secalin, II, 119.
- and Bartels, H. E., β -methylfructofuranoside, II, 36.
- Schlumberger, H. See Lucke, B.
- Schlutz, F. W. See Morse, M., and Oldham, H.
- Schmahl, N. G., and Schewe, J., thermal demixing of gas mixtures. II. Thermo-diffusion, I, 315.
- Schmeil, M. See John, W.
- Schmeisser, M., nitrogen bromide, I, 265.
- Schmerling, L., Friedman, B. S., and Ipatiev, V. N., preparation and properties of aliphatic hydrocarbons, II, 361.
- See also Ipatiev, V. N.
- Schmid, G., and Roll, A., effect of intense sound on metallic melts. II. Importance of frequency and intensity of the sound in grain-refining, I, 107.
- and Rommel, O., rupture of macromolecules by ultrasonic waves, I, 35.
- Schmid, H., microbiological observations on digestive processes in ruminants, especially the conversion of nitrogen compounds, III, 856.
- See also Klein, W.
- Schmid, Hermann, kinetic methods of substitution, a method for determining particularly short-lived intermediate substances, I, 222.
- See also Steinke, E. G.
- Schmid, R. See Gerö, L.
- Schmidt, A. W., Hopp, G., and Schoeller, V., preparation and physical data of monoalkylbenzenes, II, 73.
- Schmidt, C. F., and Comroe, J. H., jun., functions of carotid and aortic bodies, III, 192.
- Comroe, J. H., jun., and Dripps, R. D., carotid body [respiratory] reflexes in dog, III, 104.
- Dumke, P. R., and Dripps, R. D., part played by carotid body reflexes in respiratory response of dog to small changes in CO₂ tension in arterial blood, III, 477.
- Schmidt, C. L. A., Allen, F. W., and Tarver, H., theory of protein metabolism: transformation of proteins, III, 326.
- See also Batchelder, A. C., and Cohn, E. T.
- Schmidt, C. R., Beazell, J. M., Atkinson, A. J., and Ivy, A. C., effect of therapeutic agents on volume and constituents of bile, III, 137.
- Beazell, J. M., Berman, A. L., Ivy, A. C., and Atkinson, A. J., secretion of bile, III, 136.
- See also Beazell, J. M.
- Schmidt, E. C. H., jun. See Richter, C. P.
- Schmidt, E. G., histidine content ("diazovalue") of blood in peptic ulcer, III, 381.
- Schmidt, F. See Weitz, E.
- Schmidt, G. See Knoll, W.
- Schmidt, Hans, ring formation in growth of bacteria, III, 265.
- Schmidt, Heini. See Schmidt, O.
- Schmidt, Helmut. See Borsche, W.
- Schmidt, Hubert. See Winegar, A. H.
- Schmidt, H. G., determination of copper in serum, III, 97.
- Schmidt, H. L. See Sydenstricker, V. P.
- Schmidt, H. R. See Fantus, B.
- Schmidt, H. W., diffuse spasm of lower half of cesophagus, III, 309.
- Schmidt, K. See Anschütz, L.
- Schmidt, L. H., and Hilles, C., response of different strains of type I pneumococcus to sulphapyridine, III, 676.
- Schmidt, M. B. See Robbins, W. J.

- Schmidt, O., density distribution and energy spectrum of *B*-electrons. IV. Mechanism of excitation process in cancerous and healthy cells, III, 142. Determination of carbon monoxide in blood of smokers, III, 389. Determination of minute quantities of carbon monoxide in blood, III, 389.
- and Schmidt, Heini, density distribution and energy spectrum of *B*-electrons. III. Frame model [for the aromatic nucleus] (cylinder-ring, compression of *B*-electrons), I, 11.
- Schmidt, P. W., action of albusid on experimental trichophytia, III, 920.
- Schmidt, R. L. See Climenko, D. R.
- Schmidt, W. See Du Mont, H. L.
- Schmidt, W. J., class demonstrations on double refraction of elastin fibres, III, 259.
- Schmidt-Nielsen, S., free fatty acid content of pancreas, III, 310.
- Schmidt-Thomé, J. See Butenandt, A.
- Schmitt, See Andrieux.
- Schmitt, F., effect of anaemia on mineral content of red cells and plasma, III, 6. Relationship between carbonic anhydrase and mineral content of plasma and red cells, III, 12.
- and Lossie, H., action of sodium thiosulphate on mineral metabolism and blood-lead level in lead poisoning, III, 65.
- and Röttger, I., effect of acid and alkaline diet on blood-lead level and mineral content of plasma and red cells, III, 12.
- Schmitt, F. O., Bear, R. S., and Silber, R. H., organic and inorganic electrolytes in lobster nerves, III, 197.
- and Schmitt, O. H., partial excitation and variable conduction in squid giant axon, III, 391.
- See also Bear, R. S.
- Schmitt, H., Pewabic mine [Hanover, New Mexico], I, 45.
- Schmitt, K. See Reinhold, H.
- Schmitt, O. H. See Katz, B., Pumphrey, R. J., and Schmitt, F. O.
- Schmitt, W., and Wieland, H., quinic acid. VIII., II, 88.
- Schmitz, L. See Antropoff, A. von.
- Schmitz, R. H. See Loiseleur, J.
- Schmitz, R. L. See Brunschwlg, A.
- Schmitz-Dumont, O., and Braschos, A., phosphonitrile fluorides. II., I, 128.
- Schmole, G. See Lottermoser, A.
- Schmuk, A., chemical structure of chromosomes, III, 180.
- and Borozdina, A., determination of nicotine and anabasine present together, II, 264.
- and Guseva, A., structure of substances inducing polyploidy in plants, III, 272. Haloid derivatives of aromatic hydrocarbons and their polyploidogenic activity, III, 616. Polyploidogenic action on plants of naphthol ethers and naphthoic acid esters, III, 693.
- Kostov, D., and Borozdina, A., change in alkaloid composition due to the influence of stock on soil in *Nicotiana*, III, 547.
- Schmule, K., absorption by dipole liquids and electrolytes in the region of short electric waves, I, 97.
- Schneider, A., occurrence of lactic acid in higher plants, III, 944.
- Schneider, Armin, change of heat of activation of the phase AuCu during order-disorder transition, I, 20. Influence of state of order on heats of reaction of alloy catalysts, I, 326.
- and Esch, U., b.p. of magnesium and magnesium alloys, I, 289.
- and Hesse, E., equilibrium measurements for the thermal reduction of magnesium oxide with silicon, I, 361.
- Schneider, B. A., effects of feeding thyroid substance, III, 496.
- Schneider, C. L. See Thimann, K. V.
- Schneider, E. See Daly, S.
- Schneider, E. C., and Crampton, C. B., comparison of respiratory and circulatory reactions of athletes and non-athletes, III, 763.
- Schneider, E. G., absorption of air in the extreme ultra-violet, I, 343.
- Schneider, H. A., butter fat in dermatitis-producing diets, III, 751.
- Ascham, J. K., Platz, B. R., and Steenbock, H., anti-acrodynamic properties of certain foods, III, 52.
- Steenbock, H., and Platz, B. R., essential fatty acids, vitamin-B₆, and other factors in cure of rat acrodynia, III, 323.
- Schneider, H. J., and Fisk, R., toxin in blood and tissues in botulism, III, 354.
- Schneider, Irmgard. See Hückel, W.
- Schneider, Isadore. See Hovorka, F., and McCullagh, D. R.
- Schneider, J. A., hypocalcaemia in patients with hypophyseal hypofunction, III, 408.
- Schneider, J. J. See Evans, E. A., jun.
- Schneider, M. See Maltesos, C.
- Schneider, O. See Strotzer, E. F.
- Schneiders, J. See Staudinger, H.
- Schneidewind, Z., and Trajtenberg, S., ascorbic acid in post-arsenical dermatitis, III, 515.
- Schneierman, S. S. See Grabar, P.
- Schnepf, F., influence of green fodder, silage, and hay on metabolism of ruminants, III, 230.
- Schnettler, O. See Carrié, C.
- Schneider, O., synthesis of soporifics of the pyridine series, II, 381.
- Schnitzer, J. See Breuer, G.
- Schnur, S., deep injection of novocain for relief of pleural pain, III, 441.
- Schnurmann, R., angle of repose of snow on solids, I, 289.
- Schoch, A. G., and Shelmire, B., erysipeloid of Rosenbach successfully treated with sulphanilamide, III, 521.
- Schoch, E. P., Hoffmann, A. E., Kasperik, A. S., Lightfoot, J. H., and Mayfield, F. D., solubility of methane in benzene, I, 319.
- Schoch, M. A., clinic and treatment of hemorrhagic diatheses, III, 558.
- Schockaert, J. A., Delrue, G., and Ferin, J., comparative action of oestradiol and dihydroxydiethylstilbene on vaginal pH, III, 656.
- Schöber, M., action of vitamin-C on thyroid, III, 208.
- Schöberl, A., and Braun, H., synthesis and properties of isocysteine and isocystine, II, 71.
- and Fischer, M., sulphur content and activation of papain, III, 163.
- Schoedel, W. See Benzinger, T.
- Schoeller, V. See Schmidt, A. W.
- Schoeller, W. R. See Lambie, D. A.
- Schölzke, K. H. See Hüllstrang, H.
- Schoen, H. See König, E.
- Schön, M. See Riehl, N.
- Schoen, R., transmission of disease of Nicolas and Favre by nasal instillation of the germ in rabbit and guinea-pig, III, 267.
- Schön, W., clinical experience with Abderhalden's [interferometer] serum reaction, III, 471.
- Schönamsgruber, M. See Pummerer, R.
- Schönberg, A., and Ismail, A. F. A., colour reaction of maleic anhydride, *p*-benzoquinone, and their partly-substituted derivatives, II, 35.
- Robson, J. M., Tadros, W., and Fahim, H. A., synthetic oestrogens related to triphenylethylene, II, 339.
- and Warren, F. L., synthesis of phenanthrene derivatives, II, 45.
- Schönberg, M., origin of the hard component of cosmic radiation, I, 279.
- Schönbrunner, E. See Raab, W.
- Schönbrunner, J., increasing bacterial saturation of double linkings by using mixtures of bacteria, III, 768.
- Schoenewald, G., Schweitzer, A., and Steel, G. C., action of veritol on heart and blood pressure, III, 525.
- Schoenheimer, R., Ratner, S., and Rittenberg, D., protein metabolism. X. Metabolic activity of body-proteins investigated with *l*(-)-leucine containing two isotopes, III, 148.
- See also Bernhard, K., Bloch, K., Clutton, R. F., Du Vigneaud, V., Moss, A. R., Ratner, S., Stetten, DeW., jun., and Vickery, H. B.
- Schönholzer, G., mineral metabolism and mercurial diuresis, III, 251. Action of chophytol on cholesterol metabolism in arteriosclerosis, III, 256.
- Schoff, S. L., ground water in the Oklahoma Panhandle, I, 396.
- Schofield, F. H. See Barber, C. R.
- Scholer, H., treatment of brucellosis [with M. and B. 693], III, 60.
- Scholins, M. A. See Tschalov, N. V.
- Scholl, W. See Pfeiffer, P.
- Scholtz, J. R., McEachern, K. D., and Wood, C., clinical use of sobisminol mass, III, 336.
- Scholtz, M. See Weber, F. P.
- Scholz, R. O., and Ralston, E. M., absorption of sodium ferrocyanide from sub-arachnoid space into venous system, III, 487.
- Schomaker, V., and Stevenson, D. P., molecular structure of sulphur dioxide, I, 312. Electron diffraction investigation of structure of propylene bromide, I, 433.
- See also Lu Valle, J. E., and Stevenson, D. P.
- Schomer, H. O. See Miller, E. V.
- Schonberger, S. See MacQuiddy, E. L.
- Schoon, E. See Thiessen, P. A.
- Schoon, T., theory and applicability of electron interference measurements. I. Electron diffraction experiments. II. Applicability of electron interference measurements, I, 13. Stability of polymorphous forms of normal hydrocarbons with long stretched chains and their derivatives, II, 61.
- and Hanl, R., determination of size of crystallites from broadening of electron diffraction interference rings, I, 42.
- See also Hanl, R.
- Schoorl, N., copper sulphate as a titrimetric standard substance, I, 38. Hygroscopicity of mixtures, I, 66. Dissociation constants and titration exponents of less common alkaloids, I, 73. A little-known reaction for benzoic acid, II, 219.

- Schopfer, W. H., aneurin and heterotrophy in micro-organisms, III, 172. Effect of animal products on development of *Phycomyces*; milk, III, 450. Factors influencing growth and sex in *Phycomyces*, III, 687. Cyto-physiology of thiochrome, III, 692.
- and Blumer, S., action of vitamin-E on plants, III, 272. Specificity of action of pyrimidine component of aneurin, the growth factor for micro-organisms, III, 538.
- and Blumer, S. [with Kocher, V.], biology of *Ustilago violacea* (Pers.), Fuck. II. Action of aneurin and other vitamin-like growth-substances, III, 450.
- and Rytz, W., jun., cotton-wool as a source of growth-substance for micro-organisms, III, 450.
- Schorigin, P. P., and Matschinskaja, J. V., fission of tetra-arylmethanes by liquid alloys of potassium and sodium, II, 39.
- Schormüller, J., occurrence of vitamin-B₂ (lactoflavin). IV. Combination of lactoflavin with proteins, III, 513.
- Scherr, L., zone formation in protoplasm of vegetable cells, III, 262.
- Scherr, R. See Bakwin, H.
- Schotland, C. E. See Antopol, W.
- Schott-Lvova, E. A., and Sirkin, J. K., dipole moments of compounds containing the carbonyl group, I, 58.
- Schottky, W., and Spenke, E., space-charge and lattice-layer theories of the crystal rectifier, I, 147.
- See also Dressnandt, H.
- Schousboe, J., splenic control of cell emission from the bone marrow, III, 382.
- Schouten, J. F., the residue, a new component in subjective sound analysis, III, 576.
- Schouwenburg, K. L. van. See Johnson, F. H.
- Schpanion, A. L. See Gabel, J. O.
- Schpikelman, A. I. See Lepeshkov, I. N.
- Schpinel, V. S. See Korsunski, M. I.
- Schpnt, S. J., mutual system: monoammonium phosphate-sodium nitrate-water. I and II, I, 294.
- Schrader, G. A., iodometric determination of pyruvic acid, III, 550.
- Schrameck, G. See Debre, R.
- Schramm, W. See Nehring, K.
- Schreiber, B., and Angeletti, S., rhythmic increase and decrease of nuclear volume of hepatic cell of carp, III, 701.
- Schreiber, E. See Heubner, W.
- Schreiber, F., neurological sequelæ of paranasal asphyxia, III, 566.
- Schreiber, R. S. See Shriner, R. L.
- Schrek, R., nomogram for determining statistical significance and probable error of differences of percentages, III, 176.
- Schremp, E. J., identifying the primary cosmic rays, I, 341.
- and Ribner, H. S., fine-structure pattern of directional cosmic-ray intensity, I, 188.
- Schrenk, H. H., Yant, W. P., Pearce, S. J., and Sayers, R. R., comparative physiological effects of pure, commercial, and crude benzenes, III, 762.
- See also Ballard, J. W.
- Schritt, M. H. See Co-Tui, F. W.
- Schrimpl, F., action of eupaverin in arterial embolism, III, 794.
- Schrire, I. See Sharpey-Schafer, E. P.
- Schroder, F., formation of tetrads and meiotic mitoses in male of *Rhytidolomia senilis*, III, 784.
- Schroeder, A. R. See Brewer, G.
- Schröder, C. G. See Fischer, Hans.
- Schroeder, C. R. See Kennard, M. A., and Winer, J. H.
- Schröder, E. See Eucken, A.
- Schröder, H., magnetic properties of ferromagnetic impurities in non-ferrous alloys, I, 107.
- Schroeder, H. A., effect of tyrosinase on blood pressure of hypertensive rats, III, 710.
- and Fish, G. W., effect of nephrectomy on hypertension associated with organic renal disease, III, 666.
- and Steele, J. M., essential hypertension, III, 103.
- See also Starr, I.
- Schroeder, M. P., and Cook, E. S., effects of tissue extracts on respiration and glycolysis of normal and tumour tissues, III, 508.
- Schröder, V., artificial sex regulation in mammals by means of electrophoresis and biological control, III, 657. Physico-chemical analysis of sperm physiology (mammal sperm); lipins of rabbit sperm which migrate to anode and cathode, III, 657.
- Schroeder, W., effect of galvanic currents on response of isolated frog heart to acetylcholine, III, 564.
- Schroeder, W. A. See Pagel, H. A.
- Schropp, W. See Arenz, B.
- Schtern, V., and Poljak, S., polarographic analysis of mixtures of aldehydes and peroxides, II, 264.
- Schtscherbakov, A. A., and Markov, B. F., electrical conductivity of molten carnallite, I, 218.
- Schtscherbakov, I. A. See Ass, T. V.
- Schtscherbakov, N. M., vegetative theory of functions of striated muscles, III, 108.
- See also Kraichin, B.
- Schtscherbina, V. V., oxidation-reduction potentials as applied to the study of the paragenesis of minerals, I, 46.
- Schtscholkina, K. I., development of detonation in gases, I, 29.
- Schtukin, G. I., Grignard syntheses of halogen derivatives of ethylenic alcohols, II, 243.
- Schube, P. G., Myerson, A., and Lambert, R., effect of acetyl- β -methylcholine chloride on gall bladder, III, 136.
- Raskin, N., and Campbell, E., cholesterololysis in the blood plasma of individuals with mental disorders, III, 96.
- Schubel, E. C. W., poisoning by hydrocyanic acid, III, 253.
- Schubert, G., and Grüner, A., free gases in blood and tissues during rapid decompression, III, 19.
- Schubert, M., action of pantocain in anal eczema, III, 252.
- Schubert, M. P. See Granick, S., and Michaelis, L.
- Schubotho, H., histological changes in endocrine organs produced by anoxia and hunger, III, 641.
- Schuch, J., pulsating direct current arc discharges, I, 331.
- Schuchardt, E., complement content of human serum, III, 869.
- Schüler, H., Gollnow, H., and Fechner, E., molecular binding energy between atomic hydrogen and aluminium atoms in aluminium, I, 92.
- Schürch, O., carcinogenic action of benzpyrene in rabbits, III, 316.
- Schütte, E. See Stötter, G.
- Schuetter, H. A. See Woessner, W. W.
- Schütza, H. See Thiessen, P. A.
- Schütze, M., direct determination of oxygen in metallic oxides and organic substances, I, 173. Direct [semi-micro-] determination of oxygen in organic substances, II, 199.
- Schuhknecht, W. See Wurzschnmitt, B.
- Schuhler, H., spectral and physico-chemical properties of colchicine, I, 243.
- Schuil, A. E., viscosity of gases and molecular mean free path, I, 65.
- Schuleit, H. See Krauss, W.
- Schulek, E., and Floderer, J., colorimetric determination of vitamin-C, III, 53.
- Schulman, J. H., and Cockbain, E. G., molecular interactions at oil-water interfaces. I. Molecular complex formation and stability of oil-in-water emulsions. II. Phase inversion and stability of water-in-oil emulsions, I, 320.
- See also Alexander, A. E., Carter, G. S., Gatty, O., and Rideal, E. K.
- Schulte, J. W., Tainter, M. L., and Dille, J. M., different types of central stimulation from anaesthetics, III, 252.
- Schulte, M. J., detection of gold in faeces, III, 65.
- Schulten, H., metallic carbonyls. XXIX. Mechanism of the high-pressure synthesis of cobalt carbonyl from cobalt halides. XXX. Rhenium-carbon monoxide compounds, I, 128, 129.
- Schultz, A. H., size of orbit and eye in primates, III, 784.
- Schultz, A. S., Atkin, L., and Frey, C. N., effect of bios on nitrogen metabolism of yeast. I. Ammonia and urea, III, 826.
- Schultz, B. H. See De Haas, W. J.
- Schultz, E. W., chemical prevention and treatment of poliomyelitis, III, 543.
- Schultz, F. H., and Hill, R. M., effect of sodium salt of 1:5-diphenylpyrazoline-3-carboxylic acid on body temperature of normal albino rats at different environmental temperatures, III, 823. Toxicity of sodium salt of 1:5-diphenylpyrazoline-3-carboxylic acid, III, 864.
- Schultz, H. L. See Pollard, E.
- Schultz, I. H., psychotherapy of bronchial asthma, III, 387.
- Schultz, J., and Lewis, H. B., excretion of volatile selenium compounds after administration of sodium selenite to rats, III, 435.
- See also Caspersson, T., and Lewis, H. B.
- Schultz, V. M. See Sergienko, F. E.
- Schultz, W., infectious mononucleosis, III, 377.
- Schultze, G. See Simon, A.
- Schultze, M. O., metallic elements and blood formation, III, 181.
- Harzer, C. J., and King, C. G., carrier rôle of ascorbic acid in animal tissues, III, 52.
- See also Harzer, C. J.
- Schulz, G. V., solubility of substances of high mol. wt. VII. Thermodynamics of solutions of substances of high mol. wt., I, 24. Highly polymerised compounds. CCXXIII. Kinetics of chain polymerisations. VIII. Branching reactions, I, 28. Excitation of chain polymerisation by free radicals. II, 1, 120. Osmotic pressure, heat of dilution, and entropy of dilution, I, 257.
- Dinglinger, A., and Husemann, E., thermal polymerisation of styrene, I, 259.

- Schulz, H., changes in [islets of] pancreas of pigeons during pregnancy, III, 644.
- Schulz, Helga, and Kocz, F., experiments with the plankton tower, III, 351.
- Schulz, P., electron concentration and temperature in the mercury high-pressure discharge and their determination through broadening of the spectral lines, I, 183.
- Schulz, R., calculation of average error, III, 554.
- Schulz, R. Z. See Hass, G.
- Schulz, W. See Schemensky, W.
- Schulze, A. See Kröhnke, F.
- Schulze, G. E. R., crystal chemistry of intermetallic compounds of the AB_2 type (Laves phases), I, 284.
- Schulze, H. A. See Chen, K. K.
- Schulze, J. W., and Visscher, M. B., osmotic activity changes of serum and salt solutions placed in gall bladder, III, 909.
- Schulze, W. H. See Beck, H. G.
- Schumacher, A. E., and Heuser, G. F., riboflavin content of yeasts; determination photometrically and biologically, III, 513. Importance of riboflavin in reproduction in poultry, III, 513.
- Heuser, G. F., and Norris, L. C., alcohol precipitate factor required by the chick, III, 820.
- Schumacher, G., experiences with *Digitalis lanata*, III, 601.
- See also Fucks, W.
- Schumacher, G. A., Goodell, H., Hardy, J. D., and Wolff, H. G., uniformity of pain threshold in man, III, 800.
- Schumacher, H. J. See Alexander, W. A., Braunwarth, V., and Meissner, H. P.
- Schumacher, I. C. See Falcner, E. H.
- Schumann, H., glycogen, phosphagen, and adenylypyrophosphoric acid content of heart muscle during oxygen lack, III, 15.
- Schumann, S. C. See Aston, J. G.
- Schumb, W. C., Evans, R. D., and Hastings, (Miss) J. L., radioactive determination of protoactinium in siliceous terrestrial and meteoritic material, I, 135.
- Schupfer, F., potentiation of adrenaline by ascorbic acid. I. Effect on iris muscle, III, 862.
- Schurecht, H. G., and Fréchette, V. D., recrystallisation of magnesium, I, 333.
- Schuster-Woldan, E., sensitivity to nicotine of *Lebistes reticulatus*, III, 527.
- Schutz, P. W., and Mallonee, R. E., binary liquid systems. II. Azeotropic composition of carbon tetrachloride-ethyl acetate mixtures as a function of the pressure, I, 360.
- Schvartzman, A. G. See Kolesnikov, D. G.
- Schwab, G. M., and Agliardi, N., influence of organic radicals on para-hydrogen. II. Nature of diradicals, II, 270.
- and Drikos, G., combustion of carbon monoxide on hopcalite and its components, I, 225.
- and Ghosh, A. N., inorganic chromatography. IV. Chromatography as aid in qualitative analysis. V. Inorganic chromatography as an auxiliary method in micro-analysis, I, 132, 377.
- Schwab, R. S. See Viets, H. R.
- Schwabacher, H. See Wilson, G. S.
- Schwabe, E. L. See Emery, F. E.
- Schwabe, K., and Herdey, O., *jun.*, pH measurements with new high-conductivity glass electrodes, I, 133.
- Schwandt, E., action of gastrosil B in hyperacidity and gastric ulcer, III, 219.
- Schwartz, G. M., hydrothermal alteration of igneous rocks, I, 46.
- Schwartz, H. G., and Kerr, A. S., electrical activity of exposed human brain, III, 719.
- Schwartz, I. See Enachescu, M.
- Schwartz, L. See Dimitriu, C. C.
- Schwartz, Leon, Flippin, H. F., and Turnbull, W. G., treatment of pneumococcal pneumonia [with sulphapyridine and serum], III, 437.
- See also Flippin, H. F., Pepper, D. S., and Reinhold, J. G.
- Schwartz, Louis, Warren, L. H., and Goldman, F. H., clothing for protection against occupational skin irritants, III, 824.
- Protective ointment for prevention of poison ivy dermatitis, III, 928.
- Warren, L. H., and Oliver, E. A., occupational leucoderma, III, 824.
- See also Foerster, H. R.
- Schwartz, M. See Allen, F.
- Schwartz, O. J., influence of temperature on oxidation-reduction processes of frog muscle at different seasons, III, 108.
- Schwartz, S. See Watson, C. J.
- Schwartz, S. C., oral pollen therapy, III, 528.
- Schwartz, S. O. See Dameshek, W.
- Schwartz, W. F., and Freeman, H. E., sulphanilamide and chaneroid, III, 599.
- See also Cole, H. N.
- Schwartz, K., prophylaxis of rickets with vitamin-D, III, 515.
- and Loeschke, E., foetal polycythaemia, III, 838.
- See also Beumer, H.
- Schwarz, E., erythraemia and myelosis, III, 7.
- Schwarz, G., photographic silver-gelatin paper as reagent in drop analysis, I, 372.
- Schwarz, H., Newman, A. B., and Baum, H., pituitary function in adiposo-genital dystrophy, III, 493.
- Schwarz, K. E., transport numbers and diffusion potentials in molten salts, I, 27.
- Electrolytic migration on metallic surfaces, I, 28.
- Schwarz, W. M., effect of temperature on reflexion of X-rays from cadmium, I, 348.
- Schwarze, P., artificial determination of digestibility of crude protein. I, III, 230.
- Schwarze, W. See Wieland, H.
- Schwarz, O. See Külz, F.
- Schwarzschild, M. M., physical principles of slit kymography, III, 696.
- Schweckendiek, W. See Fricke, R.
- Schweiger, L. R. See Ryneerson, E. H.
- Schweitzer, A. See Schoenwald, G.
- Schweitzer, C. E. See Riegel, B.
- Schweitzer, F. See Fellingner, K.
- Schweitzer, M. D., and Furth, J., susceptibility to transmitted leukaemia occurring in pure bred and hybrid mice, III, 8.
- Schweitzer, T. R. See Hoffman, C.
- Schweizer, M., Charipper, H. A., and Kleinberg, W., activity of anterior pituitary glands in adult male guinea-pig, III, 730.
- Schwenk, H., regeneration of mesonephric tubules of larval salamander after partial removal, III, 552.
- Schwenkenbecher, W., step-photometric bilirubin determinations in serum in various diseases, III, 184.
- Schwentker, F. F., and Comptoir, F. C., production of kidney antibodies by injection of homologous kidney plus bacterial toxins, III, 454.
- Schwertner, R. See Haitinger, M.
- Schwind, J. L. See Campbell, E.
- Schwindt, H., measurement of dielectric loss and of high-frequency conductivity. VII., I, 134.
- See also Wulff, P.
- Schwinger, J. See Motz, L., and Oppenheimer, J. R.
- Schwoegler, E. J., and Adkins, H., preparation of amines, II, 103.
- Schwoner, A. See Paschke, K. E.
- Sciagrà, S. See Donatelli, L.
- Sciclounoff, F., purgative action of triacetyldihydroxyphenylbenzopyrrolidone, III, 924.
- and Junet, R., use of sulphapyridine in medicine, III, 598.
- and Naville, M., effect of aneurin on neurological disturbances in pernicious anaemia, III, 557.
- Scoggin, S. M. See Neufeld, A. H.
- Scott, A. H., dielectric constant, power factor, and resistivity of marble, I, 284.
- Scott, B. L., androgenic effects from percutaneous administration in castrate rats, III, 645.
- Scott, E. B., staining mouse pituitary, III, 556.
- Scott, E. J., automatic Pirani vacuum gauge, I, 43.
- Scott, E. W., and Treon, J. F., colorimetric determination of primary mononitro-paraffins, II, 240.
- See also Deichmann, W.
- Scott, F. M., anatomy of auxin-treated etiolated seedlings of *Pisum sativum*, III, 174.
- Scott, G. H., mineral distribution in nerve cells and fibres, III, 843.
- and Canaga, B., *jun.*, barium in the mammalian retina, III, 802.
- Scott, G. M. See Russ, S.
- Scott, H. M. See Avery, T. B.
- Scott, H. W. See Bigler, J. A.
- Scott, J. A. See Baker, W.
- Scott, J. C. See Bazett, H. C., and Burton, A. C.
- Scott, J. P., sulphapyridine in treatment of pneumonia in infants and in children, III, 757.
- Scott, K. G. See Lawrence, J. M.
- Scott, L. D., rapid determination of urea in blood and urine, III, 619.
- Scott, R. B., chondrodysplasia; hereditary multiple cartilaginous exostoses, III, 2.
- Scott, S. L. See Fuson, R. C.
- Scott, V. B., techniques for preparation and care of pancreatic fistulas in dogs, III, 851.
- Scott, W. J., Irving, L., and Safford, V., transport of oxygen by blood of mink and marten, III, 195.
- Scott, W. J. M. See Stevens, R. E.
- Scott, W. S., *jun.* See Leslie, A.
- Scott, W. W., physiology of concussion, III, 721.
- Scott-Moncrieff, R., and Sturgess, V. C., natural anthocyanin pigments. III. Flower pigments of *Verbena hybrida*, III, 549.
- See also Beale, G. H., and Lawrence, W. J. C.
- Scott-Watson, H. M. See Bottomley, A. C.
- Scoz, G., lipolytic power of plasma and erythrocytes; effect of citric and oxalic acid, hydrogen-ion concentration, and amount of blood used, III, 96.
- and Mariani, B., lipase in adrenal gland of ox, III, 210.
- and Zorzoli, G., plasma- and erythrocyte-lipase during fasting and subsequent feeding, avitaminosis-C, and hyperthyroidism, III, 533.

- Scocz, G. See also Bergami, G.
 Scriba, W. See Borsche, W.
 Scribner, E. J. See Krueger, A. P.
 Scruggs, W. M., epithelial components of teleost pituitary gland, III, 785.
 Scrutinio, L., antithyroid activity of vitamin-B₁ in treatment of cardiac deficiency, III, 122.
 Scudamore, H. H. See Brown, F. A., jun.
 Scudder, J., Bishop, K., and Drew, C. R., blood preservation and plasma withdrawal, III, 878.
 See also Chamberlain, F. L., Drew, C. R., Smith, M. E., and Velick, S. F.
 Scudder, S. A., and Weinberger, S. B., pneumococcus typing by culture, III, 541.
 Scuderi, C. S., fat excretion through the kidneys, III, 138.
 Scudi, J. V., urinary excretion of "free" sulphapyridine, III, 758.
 Koones, H. F., and Keresztesy, J. C., urinary excretion of vitamin-B₆ in the rat, III, 514.
 Ratish, H. D., and Bullowa, J. G. M., increased glycuronate excretion following administration of sulphapyridine, III, 151.
 and Robinson, H. J., determination of acetylsulphapyridine. I and II, III, 435.
 Unna, K., and Antopol, W., urinary excretion of vitamin-B₆ colorimetrically determined, III, 915.
 Scull, C. W. See Eandurand, R.
 Scupham, G. W., De Takáts, G., Van Dellen, T. R., and Beck, W. C., vascular diseases, III, 16.
 Scurry, M. M., and Wittenborg, M. H., urinary obstruction due to crystalline concretions following sulphapyridine therapy in pneumonia, III, 678.
 Seaborg, G. T., Friedlaender, G., and Kennedy, J. W., mechanism of nuclear isomeride separation process, I, 306.
 Livingood, J. J., and Kennedy, J. W., radioactive isotopes of tellurium, I, 186.
 Wahl, A. C., and Kennedy, J. W., thermal diffusion separation of radioactive and ordinary hydrogen isotopes, I, 418.
 See also Grahame, D. C., Kennedy, J. W., Lewis, G. N., and Livingood, J. J.
 Seabury, J. H. See Smith, R. G.
 Seager, L. D., assay [of secretin and cholecystokinin] by contractions of frog's gall-bladder, III, 41.
 See also Auer, J.
 Sealey, J. L., and Sondern, C. W., comparative action of international standard gonadotropic substance on normal infantile male and female rats, III, 650.
 See also Sondern, C. W.
 Sealock, R. R., Galdston, M., and Steele, J. M., administration of ascorbic acid to an alcapton-uric patient, III, 917.
 Murlin, J., and Driver, R. L., effect of alkylresorcinols and related compounds on absorption of insulin from isolated intestinal loops of anaesthetized dogs, III, 498.
 and Silberstein, H. E., control of experimental alcaptonuria by means of vitamin-C, III, 313. Excretion of homogentisic acid and other tyrosine metabolites by the vitamin-C-deficient guinea-pig, III, 819.
 Seaman, W., Norton, A. R., and Hugonet, J., reduction of xylenazo- β -naphthol, II, 327.
 Norton, A. R., and Sundberg, O. E., estimation of *o*-nitrophenol in *p*-nitrophenol and *o*-aminophenol in *p*-aminophenol by fluorescence analysis, II, 319.
 Searle, D. S., and Reiner, L., effect of carbon dioxide on glucose metabolism of trypanosomes, III, 539.
 See also Reiner, L.
 Searles, P. W., effect of anaesthetics on blood, III, 64.
 Searls, E. M. See Harrington, C. D.
 Sears, J. B. See Banks, B. M.
 Sears, W. C., Cameron, D. M., and Nielsen, H. H., infra-red absorption by the selenium hydrides, I, 345.
 See also Cameron, D. M.
 Seastone, C. V., virulence of group C haemolytic streptococci of animal origin, III, 454.
 Sebba, F., and Briscoe, H. V. A., new "ageing" phenomenon in unimolecular films on water, I, 159. Variation of solubility of unimolecular films with surface pressure, and its effect on the measurement of true surface pressure, I, 160. Evaporation of water through unimolecular films, I, 160.
 Sebrell, W. H., and Butler, R. E., riboflavin deficiency in man (ariboflavinosis), III, 233.
 See also Datt, F. S., Kruse, H. D., and Sydenstricker, V. P.
 Secher, K., vitamin-C and sanocrysin for arthritis, III, 682.
 Seck, W., and Fischer, G., behaviour of starch solutions at extremely high rates of shear, I, 357.
 Seckel, H. P. G., post-mortem hepatic glycogenolysis in hyperinsulism and glycogen disease, III, 150. Influence of adrenal cortical hormone *in vitro* on glycogenolysis of surviving rat liver, III, 410.
 Seeker, J. See Burns, D.
 Secoy, C. H., and Cady, G. H., f.p. and solubility data for the system chlorine monoxide-water, I, 322.
 Secrest, P. G., jun. See Prince, H. E.
 Sederholm, P. See Benedicks, C.
 Sedlacek, A. M., rocks from Persia [Iran], I, 46.
 Sedletzki, I. D., genesis of montmorillonite and kaolinite and conditions of their joint occurrence in colloids of soils and clays, I, 48. Soil exchange cations and their geochemistry, I, 240. Absorbing complex of soil; paragenetic system of (colloidal) minerals, I, 304. Calcium montmorillonite in saline soils. I, I, 334. Principles of classification of argillaceous minerals, I, 334.
 and Jusupova, S., mineralogical composition of clays and their physical and chemical properties, I, 334.
 See, G. See Debre, R.
 Seeberg, V. P. See Dille, J. M.
 Seeder, W. A. See Wijk, W. R. van.
 Seedorf, E. E. See Kirklín, B. R.
 Seegal, B. C., anaphylactic shock and susceptibility to histamine poisoning in cotton rat, III, 925.
 and Wilcox, H. B., jun., hypersensitivity in isolated rabbit heart following intrapericardial sensitisation, III, 841.
 Seeger, D. R. See McLean, M. J.
 Seeger, R. J., and Teller, E., electric breakdown of alkali halides, I, 386.
 Seegers, W. H. See Brinkhous, K. M., Mertz, E. T., and Warner, E. D.
 Seegmiller, C. G. See Booth, H. S.
 Seekles, L., alterations in chemical composition of blood in foot and mouth disease in cattle, III, 11.
 Seelemann, M., occurrence in milk and biological behaviour of streptococci which are pathogenic to humans and animals, III, 356.
 Seeley, M. See Anderson, Ernest.
 Seery, T. M., and Bieter, R. N., pharmacology of berberine, III, 683.
 SeEVERS, M. H., and Stormont, R. T., respiratory alkalosis during anaesthesia. II. Influence on survival, III, 524.
 Stormont, R. T., and Hathaway, H. R., respiratory alkalosis during anaesthesia. I. Effects on circulatory, respiratory, and muscular activity, III, 524.
 Stormont, R. T., Hathaway, H. R., and Waters, R. M., respiratory alkalosis during anaesthesia, III, 441.
 See also Stormont, R. T.
 Segal, G., variations in histamine content of blood during X-irradiation, III, 188.
 Segal, H. L. See Stevens, R. E.
 Segal, J. See Piéron, H.
 Segal, M. See Karshan, M.
 Segall, H. N., measurement of diastolic and systolic blood pressure by palpation of arterial vibrations (sounds) over brachial artery, III, 477.
 Segaloff, A., and Nelson, W. O., thymus-adrenal relationship, III, 578. Growth of vitamin-deficient rats treated with thymocrescin, III, 724. Growth and development of six generations of rats under treatment with thymocrescin, III, 895.
 Segard, C. P., action and sources of copper in nutritional anaemia, III, 7.
 Seger, G., and Cramer, H., thermal properties of sulphur dioxide, I, 154.
 Segers, M., effect of sodium bicarbonate on response of the heart to vagal stimuli and acetylcholine, III, 191.
 Segrè, E., and Wu, C. S., fission products of uranium, I, 187.
 See also Corson, D. R., Kennedy, J. W., and Langsdorf, A., jun.
 Sehgal, R. L. See Sarin, J. L.
 Seibert, F. B., removal of impurities, nucleic acid and polysaccharide from tuberculin protein, III, 613.
 See also Friedemann, T. E.
 Seidel, C. F. See Ruzicka, L.
 Seidlin, S. M., metabolism of thyrotropic and gonadotropic hormones, III, 495.
 Seifert, H. E. See Brinton, H. P.
 Seifert, L. B., and Kolb, H., action of vitamin-A, -B, and -C in animals poisoned with A.T.10, III, 143.
 Seifter, J. See Pillemer, L.
 Seifter, S. See Ecker, E. E.
 Seigle, J., crystallisation, especially from a melt, of a substance to which a second coloured crystalline substance has been added; pro-eutectic crystallisations frequently coloured by microscopic inclusions and eutectic crystallisations, I, 26.
 Seigle, L. W., and Hass, H. B., synthesis of dinitroparaffins, II, 148.
 Seikel, (Miss) M. K., identification of organic compounds. II. Piperidyl derivatives of aromatic halogenonitro-compounds, II, 233. Oxidation products of sulphanilamide, II, 274.

- Seiler, M. See Kortüm, G.
- Seith, W., and Herrmann, J., concentration-dependence of diffusion in solid metals, I, 317.
- Seitz, F., lattice defects in silver halide crystals, I, 63.
- Seitz, W., glyceraldehyde hydrogenation by serum of patients with and without jaundice, III, 447.
- Seka, R. See Kohlrausch, K. W. F.
- Sekido, Y. See Ishii, C., and Nishina, Y.
- Selbach, H. See Weber, E.
- Selbie, F. R., inhibition of action of sulph-anilamide in mice by *p*-aminobenzoic acid, III, 597.
- and McIntosh, J., factors influencing infectivity of fowl tumours, III, 141.
- See also McIntosh, J.
- Selby, W. M. See Ralston, A. W.
- Seldon, T. H. See Mousel, L. H.
- Seldowitz, M., treatment of impetigo contagiosa with rubber containing 8-hydroxyquinoline, III, 678.
- Seley, S. A., the gastro pump, III, 35.
- Selfridge, G., eighth nerve high tone deafness from a nutritional standpoint, III, 118. Nicotinic acid and the eighth nerve, III, 205.
- Seligman, A. M., Shear, M. J., and Alexander, L., experimental production of brain tumours in mice with methylcholanthrene, III, 226.
- Seligmann, P., theoretical maxima and minima in the anomalous scattering of α -particles, I, 428.
- Selivanov, L. S., analysis of the meteorite "Saratov," I, 303.
- Selivanova, A. S., and Sirkin, J. K., kinetics of reaction between carbon sulphoxide and ammonia, I, 120.
- Selivanova, N. M., action of water on natural (Inder) borates, I, 46.
- Selker, M. L., Burk, R. E., and Lankelma, H. P., efficient low-holdup laboratory column, I, 378.
- Selle, R. M., failure of galactose given subcutaneously to produce cataract in rats, III, 397. Effect of benzedrine sulphate on chicks, III, 442.
- Selle, W. A., Paquin, F., and Brindley, P., chemotherapy in experimental cancer. I. Attempts to produce intratumoral clotting by combined action of lead and thrombogenic agents, III, 425.
- Sellers, A. L. See Blacet, F. E.
- Sellés, E., identification of traces of barbituric acid by a modification of the Parri reaction, II, 386.
- Selsam, M. E. See Trelease, S. F.
- Seltz, H., application of electromotive force measurements to binary metal systems, I, 219.
- De Witt, B. J., and McDonald, H. J., heat capacity of nickel oxide from 68° to 298° K. and the thermodynamic properties of the oxide, I, 118.
- See also De Witt, B. J.
- Selzer, C. C., body build and oxygen metabolism at rest and in exercise, III, 824.
- Selwood, P. W., magnetic measurements on hexaphenyldigermane, I, 15.
- Selye, H., blood chemical changes during recovery from exhaustive muscular exercise, III, 67. Effect of adaptation to various damaging agents on female sex organs in rat, III, 211. Toxicity of oestrogens with special reference to diethylstilboestrol, III, 413. Activity of progesterone in spayed females not pretreated with oestrin, III, 581.
- Selye, H., are gonadotropic hormones destroyed while they exert their action on ovary? III, 642. Morphological changes in female mice receiving large doses of testosterone, III, 646. Protective action of testosterone against kidney-damaging effect of sublimate, III, 647. Effect of progesterone on mouse ovary as influenced by gestation, III, 650. Interactions between various steroid hormones, III, 656. Postnatal masculinisation of female rat by means of testosterone propionate, III, 734. Action of deoxycorticosterone acetate in uraemia, III, 896. Effect of fasting on insulin sensitivity, III, 898. Production of persistent changes in genital organs of immature female rats treated with testosterone, III, 902.
- and Bassett, L., diuretic effect of progesterone, III, 850.
- and Dosne, C., inhibition by cortin of blood-sugar changes caused by adrenaline and insulin, III, 409. Changes produced by deoxycorticosterone overdosage in rat, III, 727. Corticosterone in wound shock, III, 898.
- Dosne, C., Bassett, L., and Whittaker, J., therapeutic value of adrenal cortical hormones in traumatic shock and allied conditions, III, 727.
- and Friedman, S., production of endometrial moles with steroid hormones, III, 589.
- See also Browne, J. S. L., Collip, J. B., Dalton, A. J., and Karady, S.
- Semadeni, B., two family trees of hereditary nystagmus, III, 204.
- Semadeni, E., test of heart function, III, 14.
- Semb, J. See Baumann, C. A.
- Semmens, C. S., nature of the Feulgen reaction with nucleic acid, II, 320.
- See also Bhaduri, P. N.
- Semmes, R. E., ruptured intervertebral disc, III, 177.
- Semple, J. E., perinephric abscess [resulting from anastomoses between renal cortex and perinephric fat], III, 222.
- Sen, A. B., migration of halogen [*para* to hydroxyl] in a derivative of *m*-cresol, II, 341.
- Sen, B. N., formation of periodic precipitates in the interior of other precipitates, I, 72.
- Sen, H. K., and Palit, S. R., lecture demonstration of mixed solvent action, I, 408.
- Sen, P. B. See Banerjee, S.
- Sen, P. K., effect of indolylbutyric and indolylacetic acids on rooting of green wood cuttings with special reference to litchi and mango, III, 460.
- Senekji, H. A., comparison of efficiency of drugs and dyes in killing cultures of *Leishmania tropica*, III, 247.
- Senekjian, H. See Dennis, E. W.
- Senff, H., and Klemm, W., magnetochemical investigations. XXXV. Heavy-metal complexes of phthalocyanine, II, 260.
- Sengoku, H. See Fujikawa, F.
- Sengupta, A. K. See Mahanti, P. C.
- Sen Gupta, N. C. See Mukherjee, J. N.
- Sen-Gupta, P. N., and Guha, B. C., combined ascorbic acid in plant foodstuffs. II, 111, 235. Determination of vitamin-C in foodstuffs, III, 236.
- Sen Gupta, R. L., specific ionisation of cosmic-ray particles, I, 342.
- Sen-Gupta, S. C., dehydrogenation. V. and VI., II, 254, 271.
- Senior, F. A. See Abramson, D. I.
- Senn, M. J. E. See McNamara, H.
- Senning, W. C., study of age determination and growth of *Necturus maculosus* based on parasphenoid bone, III, 781.
- Senoo, H. See Ogawa, T.
- Senour, F. See Riessomer, J. L.
- Senti, F., and Harker, D., crystal structure of rhombohedral acetamide, I, 404.
- Seraidarian, K. See Kerr, S. E.
- Serban, F. See Vangelovici, M.
- Serber, R., β -decay and mesotron lifetime, I, 54.
- See also Lamb, W. E., jun.
- Serebrennikova, M. T. See Belopolski, A. P.
- Serebrianikova, L. See Margaritov, V.
- Serfass, E. J., electron-ray titrimeter, I, 446.
- Serfaty, A., and Louvier, R., influence of seasons on catalase content of the blood of domestic cocks and hens, III, 187.
- See also Corteggiani, E.
- Sergeev, L. I., and Sergeeva, K. A., effect of ions of aluminium and phosphoric acid on biological properties of plant protoplasm, III, 80. Ionic action as a means of controlling [frost]-resistance and growth of plants, III, 80.
- Sergeeva, K. A. See Sergeev, L. I.
- Sergeyeva, M. A., microscopic changes in islands of Langerhans produced by sympathetic and parasympathetic stimulation in cat, III, 836.
- See also Bakkin, B. P.
- Sergienko, F. E., Schultz, V. M., Tscherniavskaja, Z. P., and Topoljanskaja, S. I., nature of bacteriophage, and its action *in vitro*, III, 357.
- Sergienko, S. R., dehydrogenation and irreversible catalysis of 1-vinyl- Δ^3 -cyclohexene, II, 247. Catalytic dehydrogenation of ethylbenzene, II, 248.
- Sergievskaia, S. I., derivatives of naphthyl- and tetrahydronaphthyl-oxamic acids, and preparation of 4-nitro- α -naphthylamine, II, 248.
- Serpe, J., natural width and displacement of spectral lines, I, 137.
- Servant, R., polarimetric researches in the Schumann ultra-violet, I, 83.
- Servantie, L., and Demange, G., photo-colorimetric determination of free or combined sulphanilamide and related compounds by Marshall's reaction in filtered light, III, 275.
- See also Mauriac, P.
- Servigne, M., detection and micro-determination of rare elements by luminescence, I, 269. Photo-luminescence of scheelites, I, 303.
- and Tchakirian, A., rare-earth elements in calcareous ags (*Litholamnium calcareum*), III, 83.
- Seshachar, B. R., testicular ova in *Uraeotyphlus narayani*, Seshachar, III, 3.
- Seshadri, C. See Subbaraya, T. S.
- Seshadri, T. R. See Murti, G. V. L. N., Murti, P. B. R., Rangaswami, S., Rao, N. V. S., Rao, P. S., and Row, L. R.
- Seshan, P. K., vitamin-A content of liver and depot fats of Indian fish, III, 818.
- Sethna, S. M., and Shah, R. C., Pechmann condensation of methyl β -resorcyate with β -ketonic esters, II, 258. Kostanecki acylation of oracateophenone, II, 258. Kostanecki-Robinson reaction. I. Acetylation of oracateophenone and its monomethyl ether, II, 285. Pechmann condensation of *p*-orsellinic acid with ethyl acetoacetate; synthesis of 7-hydroxy-4:5-dimethylcoumarin, II, 285.

- Setterstrom, C. See Weedon, F. R.
- Seufert, E., vitamin-A supply [and night-blindness], III, 427.
- Sevag, M. G., Smolens, J., and Lackman, D. B., nucleic acid content and distribution in *Streptococcus pyogenes*, III, 771.
- Sevastianov, N. G. See Shdanov, G. S.
- Severac, M. See Raiziss, G. W.
- Severin, J. E., effect of ovariectomy on lactating bitches, III, 739.
- Severinghaus, A. E., and Thompson, K. W., cytological changes induced in hypophysis by prolonged administration of pituitary extract, III, 28.
- See also Chiles, J. A.
- Sevin, A., and Buttiaux, R., characters and systematic position of Morgan's bacillus, III, 169.
- Sevringhaus, E. L., use of ovarian or pituitary hormones in menstrual disturbances, III, 661.
- Sextl, T., and Urban, P., range groups of the natural H-radiation, I, 3.
- Seya, K., decomposition of ammonia by iron catalyst, I, 169.
- Seybold, A., and Egle, K., chromatographic examination of leaf pigments, III, 945.
- Protochlorophyll, II, III, 945.
- Seybold, W. D., transverse fibrous bands in spinal dural sac of man, III, 621.
- and Moore, R. M., oculomotor nerve and reflex dilatation of pupil, III, 892.
- Seymour, W. B., preparation of cellophane membranes of graded permeability, III, 778.
- Shabica, A. C. See Marker, R. E.
- Shaby, J. A. See Hoff, H.
- Shackelford, J. See Cleveland, F. F.
- Shafer, G. D., calcium ions necessary to synaptic transmission in parasympathetic, not in sympathetic, ganglia, III, 153.
- Shafer, J., jun., solutions of chlorophyll in water, III, 778.
- Shafer, B., effect of Roentgen rays on skin reactivity to histamine and bacterial vaccine, III, 930.
- and Collins, L. H., jun., pemphigoid eruption associated with haemorrhagic nephritis following bismuth therapy, III, 863.
- See also Pillsbury, D. M.
- Shafer, J. M., disease of liver in hyperthyroidism, III, 417.
- Shafer, M. F., and Bennett, G. A., passage of type III rabbit virulent pneumococci from vascular system into joints and certain other body cavities, III, 453.
- See also Bennett, G. A., and Rake, G.
- Shafer, P. A., action of sulphanilamide, III, 59.
- Shaffer, W. H., Nielsen, H. H., and Thomas, L. H., rotation-vibration energies of tetrahedrally symmetric pentatomic molecules. I and II, I, 11, 60.
- Shah, C. S. See Rochelmeyer, H.
- Shah, H. A., and Shah, R. C., γ -substitution in the resorcinol nucleus. V. Gattermann reaction with 4-acylresorcinols, II, 132. C-Alkylresorcinols. IV. Nuclear methylation of 4-acylresorcinols, II, 223. Furano-compounds. I. Synthesis of 3'-methyl- or -ethyl-5:6:4':5'-furocoumarin, II, 259.
- Shah, M. J. See Singh, I.
- Shah, M. P., and Thosar, V. B., action of nitrosyl chloride on monobromomalonamides, II, 76.
- Shah, N. M., condensation of α -substituted acetoacetates with phenols. II. Use of various condensing agents with ethyl α -acetoglutarate, II, 127.
- Shah, R. C. See Acharya, B. G., Gokhale, G. D., Sethna, S. M., Shah, H. A., and Shenoi, R. B.
- Shahane, R. Y. See Bhagwat, V. K.
- Shambaugh, G. E., jun., chronic progressive deafness, including otosclerosis and diseases of inner ear, III, 205. Diplacusis: localising symptom of disease of organ of Corti, III, 400.
- Shamboorov, D. A., and Tchibukmakher, N. B., peripheral nerve barrier. II. Immunity of nerve to toxins, III, 263.
- Shanahan, W. M. See Ebaugh, F. G.
- Shand, G. See Clow, A.
- Shanes, A. M., demonstration of shape of cilia in normal motion, III, 274. Effect of electrotonus on accommodation in nerve, III, 714.
- Shanker, J., Baljekar, P. N., and Prasad, M., space-group determination of crystals of melamine, I, 246.
- Shankland, R. S., and Tindal, C. H., efficiency of Geiger-Müller counters, I, 41.
- Shannon, J. A., and Winton, F. R., renal excretion (dog) of inulin and creatinine, III, 503.
- Shannon, W. R., tetany syndrome in newborn infants; remote deposit of calcium salts following injection of calcium gluconate, III, 29.
- Shantz, E. M. See Embree, N. D.
- Shapiro, A. See Koster, H.
- Shapiro, B., and Tosti, V. G., ventricular dilatation in spina bifida, III, 570.
- Shapiro, C. J., effect of toxic carbohydrate complex from *S. enteritidis* on transplantable rat tumours in tissue culture, III, 671.
- Shapiro, C. S. See Fales, H. A.
- Shapiro, H., rocking device for Carrel flasks, I, 84.
- See also Calingaert, G., Chudnoff, J., and Pincus, G.
- Shapiro, H. A., action of mixtures of quinine and posterior pituitary extract on virgin guinea-pig uterus, III, 32. Seasonal changes in ovulation response of *Xenopus laevis* to methyltestosterone, III, 130.
- Shapiro, H. L., blood groups in Polynesia, III, 836.
- Shapiro, R., regional ileitis, III, 219.
- Shapiroff, B. G. P., Doublet, H., and Ruggiero, W. F., bilirubin resorption in obstructive jaundice, III, 220.
- Shapter, R. E., determination of phosphorus in plant material; use of Lorenz method after nitric-perchloric-sulphuric oxidation, III, 944.
- Share, S. S. See Hoisington, L. E.
- Sharefkin, J. G. See Ritter, J. R.
- Sharkey, W. H. See Liebhafsky, H. A.
- Sharkova, V. R., equilibria of reactions between hydrocarbons. XI. Hydrogenation of gaseous paraffin hydrocarbons, I, 213.
- Sharlit, H., urinary excretion of indoxyl (as indican) by infants with eczema, III, 313.
- Sharma, N. L., pseudomorphs after leucite in the "mica trap" of the Jharia coal-field, I, 46.
- Sharma, V. See Siddiqui, S.
- Sharma, V. R. See Linnell, W. H.
- Sharman, B. C., development of the sinker of *Orchis mascula*, III, 360.
- Sharp, A. G. See Shriner, R. L.
- Sharp, D. G., Taylor, A. R., Beard, D., Finkelstein, H., and Beard, J. W., macromolecular component of chick embryo tissue diseased with western strain equine encephalomyelitis virus, III, 455.
- Taylor, A. R., Finkelstein, H., and Beard, J. W., macromolecular components of untreated and of formalised normal chick embryo tissue, III, 786.
- See also Taylor, A. R.
- Sharp, E. A. See Emmett, A. D.
- Sharp, P. F., and Hand, D. B., carotenoid content of milk fat, III, 320.
- See also Hand, D. B.
- Sharp, T. M., long-chain alkyl derivatives of 2-aminopyridine, II, 53.
- Sharp, W. B. See Spiller, W. F.
- Sharpe, J. C., McLaughlin, C. W., and Cunningham, R., splenectomy in haemolytic jaundice, III, 94.
- Sharpey-Schafer, E. P., testosterone propionate and vasomotor phenomena, II, 647.
- and Schrire, I., effect of pituitary thyrotropic extract in subjects with low basal metabolic rates, III, 28. Effects of oestrogens on urinary creatinine of castrate and menopausal women, III, 652. Oestrogens and urinary volume, III, 653.
- See also Rowlands, J. W.
- Sharpless, G. R., prevention of hyperplasia in the fore-stomach epithelium of rats fed white flour, III, 511.
- and Hopson, E. M., cellular changes in anterior pituitary of rats with experimental goitre, III, 725.
- Pearsons, J., and Prato, G. S., production of goitre in rats with raw and with treated soya-bean flour, III, 47.
- Sharpstone, D. C., geology and development of the Polaris-Taku [British Columbia] mine, I, 422.
- Shaver, R. C., and McCrosky, C. R., volumetric analysis of sulphite solutions containing selenium, I, 231.
- Shaw, C. H., K absorption edges of Br (35) and Kr (36), I, 305. Widths and relative intensities of L-series lines of the rare earth elements, I, 381.
- See also Munier, J. H., and Snyder, T. M.
- Shaw, D. T., Kingsland, L. C., and Brues, A. M., roller bottle tissue culture system, III, 466.
- See also Nathanson, I. T.
- Shaw, J. C., respiratory quotient of intact and perfused mammary glands of cows, III, 325.
- and Petersen, W. E., blood volume changes in mammary gland, III, 658.
- Shaw, J. L. D., and McFarlane, W. D., p -dimethylaminobenzaldehyde method for determination of tryptophan compared with glyoxylic acid method, II, 146.
- Shaw, J. S. See Ackart, R. J., and Lawrence, J. S.
- Shaw, R. C. See Kaplash, B. N.
- Shay, H., and Fieman, P., laboratory test in differential diagnosis of toxic and obstructive jaundice, III, 135.
- Gershon-Cohen, J., and Fels, S. S., absorption of hydrochloric acid by human stomach, III, 35. Role of upper small intestine in control of gastric secretion; effect of neutral fat, fatty acid, and soap; phase of gastric secretion influence and relative importance of psychic and chemical phases, III, 414.

- Shay, H., Gershon-Cohen, J., Fels, S. S., Munro, F. L., and Sipler, H., absorption and dilution of glucose solutions in human stomach and duodenum, III, 219.
- Gershon-Cohen, J., Paschkis, K. E., and Fels, S. S., production of ovarian cysts by large doses of testosterone propionate in very young rats, III, 216.
- See also Gershon-Cohen, J., and Paschkis, K. E.
- Shdanov, A. P., and Missovski, L. V., disintegration of uranium nuclei in the interior of thick photographic emulsions bombarded by neutrons, I, 91.
- Shdanov, G. S., and Sevastianov, N. G., determination of the Bravais lattice and the space group [of $\text{Na}_2\text{B}_2\text{F}_4$ crystals], I, 286.
- Shdanova, L. P., mechanism of auxin formation in the green plant, III, 271.
- Shea, T. E., jun., acute and sub-acute toxicity of morpholine, III, 66.
- Shear, M. J., and Ilfeld, F. W., hydrocarbon-cholesterol pellets in strain D mice, III, 853.
- See also Cabot, S., Howe, P. R., and Seligman, A. M.
- Shear, N. See Cabot, S.
- Shear, S. K., and Fooke, A. B., dispersion of supersonic waves in cylindrical rods of polycrystalline silver, nickel, and magnesium, I, 201.
- Sheard, C., Roth, G. M., Love, J. D., and Horton, B. T., interchange of skin temperatures and regulatory heat control of upper and lower extremities after splanchnic sympathectomy, III, 793.
- See also Goodson, W. H., Phillips, R. B., and Steffens, L. F.
- Shebrak, A. R., amphidiploids of hard wheat and einkorn produced through colchicine treatment, III, 365. Production of amphidiploids of *Triticum durum* \times *T. timopheevi*, III, 365.
- Shedlovsky, T. See Longworth, L. G.
- Shee, J. C., content of iodine in soil and fresh water in Ireland in relation to endemic goitre incidence, III, 913.
- Sheehan, D., and Marrazzi, A. S., sympathetic component of sciatic nerve, III, 715.
- Sheehan, H. L., neurological complications of pregnancy, III, 20. Simmonds' disease due to post-partum necrosis of anterior pituitary, III, 402. Subendocardial haemorrhages in shock, III, 710.
- Sheehan, J. T. See Freudenberg, W.
- Sheffer, H., Janis, A. A., and Ferguson, J. B., activity of water in sulphuric acid at 25° by the isopiestic method, I, 26.
- Sheffield, F. M. L., effects of plant virus diseases on cells of their hosts, III, 83.
- See also Bawden, F. C.
- Sheftel, A. G., effect of ingested sodium chloride on concentration of haemoglobin, III, 9. Dark adaptation and vitamin-A deficiency, III, 490.
- Shehyn, H., and Pall, D. B., solubility of calcium oxalate in various salt solutions, I, 157.
- Sheibley, F. E., and Prutton, C. F., halogenation of *as*-diphenylethane, II, 210.
- Shelden, C. H., Butt, H. R., and Woltman, H. W., vitamin-E (synthetic α -tocopherol) therapy in neurologic disorders, III, 891.
- and Horton, B. T., treatment of Ménière's disease with histamine, III, 893.
- Shelden, C. H. See also Laue, J. G.
- Sheldon, J., Howes, H., Stuart, G., and Arbor, A., total water and sodium exchanges in asthmatic patients, III, 294.
- See also Feinberg, S. M.
- Shelesnyak, M. C. See Rosen, S.
- Shelezkov, P. S., calculation of titratable acidity from the total hydrogen-ion content, I, 444.
- Shelley, W. B., and Hemingway, A., gravimetric alcohol check for calibration of metabolism apparatus, III, 326.
- See also Hemingway, A.
- Shelmire, B., contact dermatitis from weeds, III, 67. Symposium on allergic dermatoses; allergic reactions to plants, III, 339.
- See also Schoch, A. G.
- Shellsell, J., and Williams, R. T., detoxication. VI. Ethereal sulphate formation in the rabbit after sulphanilamide administration, III, 519.
- Shelton, E. K., Tager, B. N., and Hoyt, E., cretinism, III, 894.
- See also Payne, S.
- Shelton, P. See Robinson, G. W.
- Shen, G., Ju, T. Y., and Wood, C. E., synthesis and properties of mono-*n*-alkylbenzenes. I. Alkylation of benzene, II, 369.
- Shen, S. C., neural tube induction with a water-soluble hydrocarbon, III, 86.
- See also Lawrence, A. S., and Needham, J.
- Shen, T. C. R., rôle of incident light in action of several drugs on secretion of hypophyseal melanophore hormone in frog (*Rana temporaria*), III, 202. Effect of F. 1262 and of corynanthine on cardiac fibrillation produced by adrenaline-benzene, III, 291.
- and Marri, R., ventricular fibrillation [produced by drugs], III, 474.
- See also Grimson, K. S., and Hauss, W. H.
- Shenoi, R. B., Shah, R. C., and Wheeler, T. S., chalkones: production of isoxazoles from some chalkone derivatives, II, 142.
- Shenolikar, G. S. See Limaye, D. B.
- Shenstone, A. G., arc spectrum of silver, I, 305. New continuum in the spectrum of helium, I, 381.
- Shepard, J. H. See Costello, M. J.
- Shepherd, E. S., fluorine content of rocks and ocean-bottom samples, I, 179.
- Shepherd, M. L., Hummel, F. C., Macy, I. G., Hunscher, H. A., Olson, M. B., Emerson, L., and Johnston, T. A., influence of raw banana and apple on disappearance of complex carbohydrates from alimentary tracts of normal children, III, 749.
- Macy, I. G., Hunscher, H. A., and Hummel, F. C., synthesised, processed, and natural sources of vitamin-C in the mineral metabolism of normal children, III, 819.
- See also Macy, I. G.
- Shepley, W. H., and McGregor, J. S., electrical shock for mental disorders, III, 201. Clinical applications of electrically induced convulsions, III, 572.
- Sheppard, C. W., and Fowler, W. A., multiple scattering of fast electrons, I, 185.
- Sheppard, E. See Davis, W. T.
- Sheppard, M. See MacLean, D. L.
- Sheppard, S. E., photographic reversal, I, 392.
- Houck, R. C., and Dittmar, C., structure of gelatin sols and gels. VI. Adsorption of water vapour and electrical conductivity, I, 162.
- Lambert, R. H., and Walker, R. D., steric influence in optically sensitising dyes, I, 193. Optical sensitising of silver halides by dyes, I, 367.
- Vanselow, W., and Happ, G. P., photovoltaic cells with silver-silver bromide electrodes. III. Optical sensitising by dyes, I, 258.
- See also Vanselow, W.
- Sheridan, H. L., staining of leucocyte granules by Sudan-black B, III, 7.
- Sherk, K. W., Houpt, A. G., and Browne, A. W., action of ethyl and phenyl azides on fuming sulphuric acid, II, 157.
- Sherman, G. D., and Thiel, G. A., dolomitisation in glacio-lacustrine silts of Lake Agassiz, I, 240.
- Sherman, H. C., and Ellis, L. N., responses to levels of intake of riboflavin, III, 51.
- Sherman, I. C. See Finkelman, I., and Kraines, S. H.
- Sherman, J. See Egloff, G.
- Sherman, S. See Macht, D. I.
- Sherman, W. B., Stull, A., and Cooke, R. A., serologic changes in hay fever cases treated over period of years, III, 691.
- See also Cooke, R. A.
- Sherman, W. C. See Koehn, C. J.
- Sherr, R., new type of nuclear reaction, I, 308.
- Sherrard, G. C., chloropicrin as a pre-warning gas in ship fumigation, III, 342.
- Sherred, J. A. See Bell, R. P.
- Sherrick, P., and Wilson, L. D., research in instrumentation, I, 42.
- Sherrill, J. W., and Mackay, E. M., experimental shock from protamine-zinc-insulin, III, 112.
- Sherry, S., and Friedman, G. J., recovery of vitamin-C from the human bladder, III, 430.
- See also Ralli, E. P.
- Sherwin, C. W., cross-section for change of charge and ionisation by high-velocity metallic ions in hydrogen and helium, I, 277.
- Sherwood, F. W. See Halverson, J. O.
- Sherwood, T. C., effect of stilboestrol on basal metabolism of experimental hyperthyroid rats, III, 656.
- Shetgiri, V. N. See Prasad, M.
- Shettles, L. B., respiration of human spermatozoa and their response to various gases and low temperatures, III, 647. Resistance of human spermatozoa *in vitro* to sulphanilamide and sulphapyridine, III, 848.
- Delfs, E., and Hellman, L. M., plasmaprothrombin in the newborn infant. II. Antepartum and neonatal ingestion of vitamin-K concentrate, III, 283.
- Shibata, N. See Osawa, A.
- Shibata, S., synthesis of 5:2'-4'-trimethoxy-3:6:3'-trimethyldiphenyl ether, II, 43.
- Shideman, F. E. See Stormont, R. T.
- Shields, J. B., Mitchell, H. H., and Ruth, W. A., effect of apple constituents on retention by growing rats of lead contained in spray residues, III, 49.
- Shigalov, V. P. See Smorodincev, I. A.
- Shigatsch, K. F., and Rehbindler, P. A., capillary activity of hydrophilic colloids, I, 22.

- Shih, S. H. See Richards, F. J.
- Shilenkov, I. V., dielectric constant of water adsorbed on powdered quartz, I, 438.
- Shils, M., Day, H. G., and McCollum, E. V., bisulphite-binding substances and thiamin deficiency, III, 673.
- Shimamura, M., and Aoki, A., gastric ulcer caused by aspirin, III, 36.
- Shimkin, M. B., induced pulmonary tumours in mice. I. Susceptibility of 7 strains of mice to the action of intravenously injected methylcholanthrene. II. Reaction of lungs of strain A mice to carcinogenic hydrocarbons, III, 421. Acute toxicity of mononitrobenzene in mice, III, 444.
- and Andervont, H. B., factors influencing carcinogenesis with methylcholanthrene. II. Lack of effect of foster nursing, III, 226.
- Shimotori, N., Emerson, Gladys A., and Evans, H. M., rôle of vitamin-E in prevention of muscular dystrophy in guinea-pigs reared on synthetic rations, III, 54. Prevention of nutritional muscular dystrophy in guinea-pigs with vitamin-E, III, 916.
- See also Morgan, A. F.
- Shin-Piaw, C., new uvial glasses of the binary system $\text{CaF}_2\text{-SiO}_2$, I, 155.
- Shinagawa, A. See Inoue, K.
- Shindo, M., blood platelet count of sucklings according to Arakawa's reaction of their mothers, III, 470.
- Shinkai, S., and Nakagawa, T., selenium rectifier for electrolysis, I, 176.
- Shinkawa, T. See Fukukei, I.
- Shinn, L. E., Main, E. R., and Mellon, R. R., conversion of sulphanilamide into *p*-hydroxylaminobenzenesulphonamide by ultra-violet irradiation, II, 164. Anticatalase activity of sulphanilamide and related compounds. VI. Sulphonhydroxamides, III, 918.
- See also Main, E. R., and Mellon, R. R.
- Shinn, M., and Wunderly, H. L., adapter for urine specimen tubes, III, 587.
- Shinohara, K., and Inaba, A., pK_e values of γ -dinitrophenol at varying concentrations of NaCl, I, 116.
- Shinomiya, C., organic molecular compounds. I. Influence of nitro-groups and second substituents on the formation of aromatic-nitroaromatic molecular compounds. II. Influence of nitro-groups and second substituents on the formation of aromatic-nitroaromatic molecular compounds. III. Molecular compound formation of aromatic hydrocarbons with nitro-compounds and with antimony trihalides. IV. Relation between compound formation and the substituent in the monosubstitution products of several aromatic hydrocarbons, I, 412, 436; II, 275.
- Shinowara, G. Y., and Brown, J. B., fatty acids. VI. Crystallisation methods in the isolation of arachidonic acid; comparison of the properties of this acid prepared by crystallisation and by debromination; structure of arachidonic acid, II, 266.
- and Reinhart, H. L., determination of sodium pregnanediol glucuronide in urine, III, 904.
- Shipley, R. A., effect of adrenalectomy on ketosis produced in rats by anterior pituitary extract, III, 728.
- Shipley, R. A., Stern, K. G., and White, A., electrophoresis of anterior pituitary proteins, III, 301.
- Shirakawa, Y., longitudinal magneto-resistance effect on single crystals of iron; longitudinal magneto-resistance effect at low temperatures of single crystals of iron, I, 405.
- Shirakura, A., acetone bodies in blood and urine in acute pancreatic disturbance of rabbits, III, 851. Disposing and forming of acetone bodies in rabbits, with ligated pancreatic duct, and with acute pancreatic necrosis, III, 851.
- Shirasaka, T., effect of vegetative drugs on bleeding time and amount of blood lost, III, 789.
- Shirley, H. L., and Meuli, L. J., influence of soil nutrients on drought-resistance of two-year-old red pine, III, 457.
- Shirreff, W. T., and Pearlman, L. N., oil of wintergreen poisoning, III, 929.
- Shishido, F. See Ishidate, M.
- Shive, J. N., modulation of Geiger counters, I, 41.
- Shive, J. W. See Minarik, C. E., and Wadleigh, C. H.
- Shivotovski, A. G. See Tschernobaev, D. O.
- Shmukler, B. C. See English, B. C.
- Shock, N. W., and Soley, M. H., average values for basal respiratory functions in adolescents and adults, III, 326. Effect of breathing pure oxygen on human respiratory volume, III, 843.
- See also Ogden, E.
- Shoemaker, H. A., sensitive drop recorder, III, 618.
- Shoemaker, H. H., effect of testosterone propionate on behaviour of female canary, III, 130.
- Shoenberg, D., properties of superconductors, I, 103. Properties of superconducting colloids and emulsions, I, 254.
- Shoetensack, H. M., relation between canine distemper and *Asterococcus canis*, type I and II, III, 262.
- Shohl, A. T., measurement of cell volume of blood by cell opacity method, III, 878.
- Butler, A. M., Blackfan, K. D., and MacLachlan, E., nitrogen metabolism during oral and parenteral administration of amino-acids of hydrolysed casein, III, 148.
- Fan, C. H., and Farber, S., effect of A.T. 10 (dihydrotachysterol) on various types of experimental rickets in rats, III, 408.
- Sholl, L. B., and Dersham, G. E., chemical test for pregnancy in mares, III, 738.
- Sales, E. K., and Langham, R., cerebellar agenesis, III, 111.
- Shomate, C. H. See Parks, G. S.
- Shoog, T., alterations of thyroid gland due to extreme temperature variation, III, 497.
- Shookhoff, C., and Blumenfeld, L., transient functional auriculo-ventricular heart block induced by swallowing of food, III, 290.
- Shookhoff, M. W. See Westheimer, F. H.
- Shope, R. E., intermediate host for swine influenza virus, III, 78. Serological studies of swine influenza viruses, III, 268.
- Shoppee, C. W., constituents of the adrenal cortex and related substances. XL. 17-isoDeoxycorticosterone, II, 350.
- and Reichstein, T., diginin. I, II, 336.
- Shore, J. See Topper, A.
- Shore, P. D. See Kremer, D. N.
- Shorland, F. B., New Zealand fish oils. III. Composition of depot fats of the ling (*Genypterus blacodes*), III, 140.
- Shorr, E., new technique for staining vaginal smears. I. and II., III, 651, 808. Effect of concomitant administration of oestrogens and progesterone on human vaginal smear, III, 735.
- and Barker, S. B., *in-vitro* action of insulin on minced avian and mammalian muscle, III, 124.
- and Papanicolaou, G. N., action of [urinary] gonadotropic hormones in amenorrhœa as evaluated by vaginal smears, III, 129.
- Robinson, F. H., and Papanicolaou, G. N., clinical use of stilbœstrol, III, 655.
- See also Ripley, H. S.
- Short, D. M. See Grimm, P. D.
- Short, J. J., and Johnson, H. J., influence of overweight on blood pressures of healthy men, III, 192.
- Short, R. H. D., vasa vasorum of femoral vein, III, 632.
- Short, W. F., hexœstrol [4:4'-dihydroxy- γ -diphenylhexane], II, 371.
- Shortley, G. H., quadrupole and magnetic dipole transition probabilities, I, 137.
- Shoupp, W. E. See Haxby, R. O.
- Shourie, K. L., and Swaminathan, M., synthesis of nicotinic acid by rats, III, 818.
- See also Giri, K. V.
- Showstack, N. See Cohen, B.
- Shrader, E. F., nuclear spin of ^{37}Cl , I, 428.
- Shreeve, K. E. See Mendenhall, W. L.
- Shreve, R. N. See Swaney, M. W.
- Shrimpton, E. A. G., error of vitamin-D assay by the method of ash content of bone, III, 916.
- See also Fieller, E. C.
- Shriner, R. L., and Anderson, J., derivatives of coumaran. VI. Reduction of 1-acetobenzofuran and its derivatives, II, 20.
- and Keyser, L. S., 5-nitro- α -*p*-dimethylaminobenzylidene- and 5-amino- α -*p*-dimethylaminobenzyl-phthalide, II, 174.
- Oppenlander, J. D., and Schreiber, R. S., hydrolysis of substituted benzenesulphonanilides. IV. Solubility of sulphonanilides in water and hydrochloric acid, II, 40.
- and Sharp, A. G., action of magnesium alkyl halides on coumarin and related compounds; synthesis of 2:2-dialkyl-1:2-benzopyrans, II, 50. Derivatives of methylacetaldehyde, II, 363.
- Shrock, R. R., Wisconsin Silurian bioherms (organic reefs), I, 48.
- Shryock, E. H., Le Masurier's method of staining macroscopic brain sections, III, 698.
- Shu, S. See Jordan, J. H.
- Shukis, A., jun., and Tallman, R. C., modification of Rauscher's method for determining mercury, I, 232.
- Shukoff, R. I. See Peacock, P. R.
- Shull, C. A., and Shull, S. P., determination of constants of water absorption by dry organic substances, I, 252.
- Shull, C. G. See Myers, F. E.
- Shull, S. P. See Shull, C. A.
- Shulman, H. See Evans, J. A.
- Shulman, I. See Mulinos, M. G.
- Shulov, A., venom of scorpion *Buthus quinquestriatus* and preparation of antiserum, III, 443.

- Shumacker, H. B., Lamont, A., and Metcalf, W., cross-circulation, III, 633.
- Shuman, H. See Goodman, M.
- Shunk, I. V., oxygen requirements for germination of seeds of *Nyssa aquatica*—Tupelo gum, III, 363.
- Shupe, I. S., determination of morpholine, II, 386.
- Shuravlev, D. I., density of molten antimony trichloride, I, 202.
- Shuravlev, E. F., application of physico-chemical analysis to study of equilibrium of liquid phases in three-component systems. II. Formation of two liquid phases in systems acetic acid-methylaniline-benzene and acetic acid-dimethylaniline-benzene, I, 216.
- Shuravleva, M. See Bujnov, M.
- Shuravskaja, A. A. See Rozenfeld, L. E., and Ruchelman, A. A.
- Shute, E. V., menorrhagia, with special reference to occult hyperthyroidism, III, 660.
- Shuto, M. See Masayama, T.
- Shutt, R. P. See Johnson, T. H.
- Shutt, R. S. See Bloomquist, C. R.
- Shutt, W. J. See Mason, W. A., and Roberts, R. H.
- Shuttleworth, F. K., good and poor years for growth of girls in stature and body-weight, III, 873.
- Shuttleworth, R. G. See Rapson, W. S.
- Sibaiya, L., structure of iridium lines, I, 1.
- Isotopes and hyperfine structure, I, 1.
- and Rao, M. R., surface tension and Lindemann frequency, I, 198.
- and Venkataramiah, H. S., magnetism of phosphors, I, 344.
- Sibata, M. See Ochiai, E.
- Sibirjakov, M. A. See Bruevitsch, S. V.
- Sibree, E. W., gas tensions in tissues, III, 887. Estimation of gas tensions in tissues by gas depot method, III, 887.
- Sibuta, H. See Yoshikawa, H.
- Sieharulidze, T. A., lens-forming properties of body epithelium in *Triton vittatus*, III, 465.
- Sickler, T. R., effect of p_H on bactericidal power of urine containing sulphanilamide, III, 861.
- Siconomiski, P., vascularisation of mucous membrane of lip, III, 466.
- Sicular, A. See Rapaport, H. G.
- Siddiqui, R. H., pyridine series. I. Synthesis of 2-methyl-4-ethylpyridine, II, 53. Strychnine and brucine. I. Strychnine. II. Brucine. III. Derivatives of dinitrostrychnic acid. IV. *iso*Strychnic acid. V. Derivatives of dinitro*iso*strychnic acid, II, 59, 261. Naphthalene series. I. Synthesis of 5-bromo- and -chloro-1-keto-7:8-dimethoxy-1:2:3:4-tetrahydronaphthalene, II, 281.
- and Khan, A. Q., pyridine series. II. Synthesis of 2-methyl-4-ethylpyridine, II, 53.
- and Salah-ud-din, naphthalene series. II. Reactions of the CH_2CO group, II, 281.
- Siddiqui, S., alkaloids from *Rauwolfia serpentina*, II, 59.
- and Sharma, F., conessine series. V. Reduction of nitroconessine to conessinoxime and conversion of the oxime into mono[hydr]oxyconessine, II, 238.
- See also Warsi, S.
- Sidel, N., and Abrams, M. I., vaccines in chronic arthritis, III, 827.
- Sideris, C. P., colorimetric micro-determination of magnesium, I, 300. Formaldoxime colorimetric method for [determining] manganese, I, 373.
- Krauss, B. H., and Young, H. Y., distribution of nitrogen fractions, sugars, and other substances in various sections of pineapple plants grown in soil and receiving either ammonium or nitrate salts, III, 458. Assimilation of ammonium and nitrate by pineapple plants grown in nutrient solutions: effects on nitrogenous and carbohydrate constituents, III, 939.
- Sidhu, S. S., and Hicks, V., superstructure and magnetism of pyrrhotite, I, 237. Space-group of pyrrhotite, I, 237.
- Siebeck, R., determination of cardiac efficiency, III, 189.
- Siebel, G., and Vosskühler, H., solubility of magnesium in aluminium, I, 156.
- Siebert, W. J., and Loose, F., sulphanilamide solution, III, 919.
- Siede, W. See Mancke, R.
- Siedek, H., salt metabolism, III, 241. Effect of thyroidectomy on oxygen debt after effort in patients with cardiac failure, III, 563.
- Siegel, S. See Bender, M. B.
- Siegel, A. E., diseases of the kidneys in infancy and childhood, III, 222. Use of sulphanilamide and sulphapyridine in children, III, 331. Heart disease in children, III, 711.
- Siegel, E. H., Waugh, L. M., and Karshan, M., dietary and metabolic studies of Eskimo children with and without dental caries, III, 745.
- See also Karshan, M.
- Siegel, J. See Moskowitz, S.
- Siegel, Sidney, variation of principal elastic moduli of Cu_3Au with temperature, I, 250.
- Siegel, Stanley, and Zachariasen, W. H., diffraction maxima in X-ray photographs, I, 285.
- Siegel, S. A. See Diamond, J. S.
- Siegert, A. J. F., dispersion formula for nuclear reactions, I, 5.
- See also Lamb, W. E., jun.
- Siegert, F., anaesthesia in gynaecology and obstetrics, III, 602.
- Siegl, J., diet in infancy, III, 230.
- Siegler, S. L., hormone of pregnant mare serum, III, 904.
- Siemonsen, H., and Ulich, H., heats of formation of the vanadium oxides V_2O_3 , V_2O_4 , and V_2O_5 , I, 323.
- See also Roth, W. A.
- Sieniewicz, T. M. See Weld, C. B.
- Sieracki, L. A. See Golden, L. A.
- Sievers, R. F. See Wagner, J. C.
- Siewert, G., disturbance of toxicological detection of barbiturates by Zwikker's reaction, III, 760.
- Sifton, H. B., lysigenous air spaces in the leaf of Labrador tea, *Ledum groenlandicum*, Oeder, III, 691.
- Sigal, A., effects of vitamin-C deficiency and diphtheria toxin on blood cells of guinea-pig, III, 90.
- Sigler, L. H., treatment of Stokes-Adams syndrome by intravenous injection of hypertonic glucose solution, III, 474. Electrocardiographic changes induced by exercise in diagnosis of coronary insufficiency, III, 632.
- Sigler, L. H., Nash, P. I., Stein, I., and Epstein, S., correlation of clinical, electrocardiographic, and circulation time findings in determining the cardiac status in infectious diseases, III, 14.
- Sihn, T. S., formation of dihydroxy-cholenic acid from apocholic acid in the toad, III, 328.
- Silaev, A. B., hydrolysis of ovalbumin in presence of acids and salts at various temperatures. I. Time of hydrolysis in autoclave and acid hydrolysis of autoclave hydrolysates. II. Effect of acids, salts, and temperature on hydrolysis in autoclave, II, 385.
- Silber, R. H. See Schmitt, F. O.
- Silberberg, M., and Silberberg, R., action of oestrogen on skeletal tissues of immature guinea-pigs, III, 30. Comparison of effects of anterior pituitary hormone on skeletal tissues of young and mature guinea-pigs, III, 302. Effect of potassium iodide on bone and cartilage in thyroidectomised immature guinea-pigs, III, 304. Effects of prolonged injections of bovine anterior pituitary extract on bone and cartilage of guinea-pigs, III, 577.
- Silberberg, R. See Silberberg, M.
- Silberschmidt, W., poisoning with bread containing lead arsenate, III, 603.
- Silberstein, H. E. See Sealock, R. R.
- Silberstein, L., two-quanta hypothesis applied to photographic reciprocity law failure, I, 79.
- See also Bertrand, G.
- Silbert, S., tobacco sensitivity, III, 761.
- See also Friedlander, M.
- Silcott, W. L. See Whitehead, R. W.
- Sillén, L. G., crystal structure of monoclinic $\alpha-Bi_2O_3$, I, 349.
- Sills, B., simple aid in making a blood smear, III, 877.
- Silnitschenko, V. G. See Rjabtschikov, D. I.
- Silva, M. R. e. See under Rocha e Silva, M.
- Silva-Mello, treatment of intestinal diseases with yatren, III, 907.
- Silver, H., and Chiego, B., nails and nail changes. I. Investigation of nail lacquers and their components. II. Modern concepts of anatomy and biochemistry of nails, III, 528, 697.
- Silver, M. L., electrical anaesthesia in rats, III, 63.
- Silver, S., inertial effects in the skeletal vibrations of tetramethylmethane and tetramethylsilicon, I, 60.
- Silverman, I. J. See Wiener, A. S.
- Silverman, M. See Wiggert, W. P.
- Silverthorne, N., active immunisation against whooping-cough, III, 264.
- Brown, A., and Auger, W. J., sulphanilamide and sulphapyridine in treatment of disease in children, III, 242.
- Simada, H., constituent of leaves of *Leucothoe keiskei*, Miq., III, 548.
- and Kano, T., constituent of fruit of *Pyraecantha angustifolia*, Schneid. (Rosaceae), III, 548.
- Simamura, H. See Ishii, C., and Nishina, Y.
- Simamura, O., action of hydrogen bromide and oxygen on various ethenoid compounds and the influence of pyrocatechol, II, 363.
- Simanovski, P. V. See Lebedinski, V. V.
- Simcox, W. J. See Pierce, H. B.
- Simenson, L. O. See Beuschlein, W. L.
- Simer, P. H. See Webb, R. L.

- Simesen, M. H., behaviour of sulphanilamide and uleron in organism, III, 519.
- Simha, R., influence of Brownian movement on viscosity of solutions, I, 160.
See also Mark, H., Mehl, J. W., and Montroll, E. W.
- Simi, B. See Speroni, G.
- Simici, D., and Popesco, M., action of urea on gastro-intestinal muscles, III, 741.
- Simkins, D. See Bernstein, M.
- Simmen, R. See Rossier, P. H.
- Simmonds, W. H. C. See Baker, W.
- Simmons, G. See Robuschi, L.
- Simmons, H. T. See Telford, E. D.
- Simmons, R. T. See Keogh, E. V.
- Simms, H. D. See Morgan, A. F.
- Simms, H. S., physiological alterations as cause of senile debility and senile mortality, III, 419.
- Simola, P. E., and Krusius, F. E., metabolism of pyruvic acid in man, III, 328.
See also Hallman, N.
- Simon, A. [with Kratzsch, G.], Raman spectroscopic studies. XVI. Structure of permonosulphuric acid, I, 95.
and Kirrét, O., Raman spectra of thiophen derivatives, I, 195.
and Knauer, A., active iron. XII. Magnetic characterisation of complex iron salts. XIII. [Magnetic] measurements on complex iron cyanides in solution, I, 59, 313. Hydrates of cobalt, nickel, and copper sulphates, I, 129.
and Schultze, G., Raman spectroscopic studies. XV. Constitution of orthophosphoric acid and its salts, I, 98.
- Simon, A. J. See Holl, F. J.
- Simon, G., discussion on kymography, III, 292.
- Simon, I., gastric elimination of sodium chloride and sulphate following intravenous injection of hypertonic solutions of the two salts, III, 35. Minimum doses of pharmaceutical substances acting on isolated toad's and frog's heart, III, 66. Pharmacology of calcium guaiaecolglycolate, III, 156. Bromine and glands of internal secretion, III, 401.
- Simon, K. T., relations between diseases of stomach and changes in blood picture, III, 376. Relation of gastric diseases to blood composition, III, 879.
- Simon, M. A., acute toxic nephritis due to inhalation of carbon tetrachloride fumes, III, 603.
See also Goldblatt, H.
- Simon, R. See Watson, W. W.
- Simon, S., action of radium on cytoplasm of *Burnea candida*, III, 342.
- Simonds, J. P. See Hepler, O. E.
- Simonelli, G. See Rossi, G.
- Simonet, M., anomalies in plant karyokinesis of the colchicine and *p*-dichlorobenzene type produced by 5-nitro-*m*-xylene, III, 693.
and Guinochet, M., action of halogenated and nitrated derivatives of cyclic hydrocarbons on mitosis in plant cells, III, 272.
and Igolen, G., colchicine-like action of the vapour of essential oil of small mandarin oranges on plant mitosis, III, 616.
- Simonis, W., influence of different coloured light on carbon dioxide assimilation and pigment content of *Elaeagnus canadensis*, III, 942.
- Simonnet, H., and Mickel, E., antihormones, III, 724.
- Simonova, N. See Pigulevski, G.
- Simons, A. See Vincent, R. S.
- Simons, E. L. See Pelmere, D. R.
- Simons, J. H., potential use of hydrogen fluoride in organic chemical processes, II, 113.
and Archer, S., hydrogen fluoride as a condensing agent. IX. Reactions of di- and tri-isobutene with phenol. XI. Reaction of alcohols and ethers with benzene, II, 166, 301.
- Archer, S., and Randall, D. I., hydrogen fluoride as a condensing agent. X. Rearrangements, II, 168.
and Glasser, J., chemical detector for molecular beams, I, 348.
and Ham, W. R., diffusion of gases through metals, I, 19.
and Passino, H. J., hydrogen fluoride as a condensing agent. XII. Reactions of methyl, ethyl, and phenyl compounds with benzene and its derivatives, II, 301.
and Russell, A. S., Raoult's law and the Clapeyron equation for substances whose vapours are polymerised, I, 17.
- Simonsen, D. G. See Pottenger, F. M., jun.
- Simonsen, J. L. See Bennett, D. J., Carter, F. D., Copp, F. C., and Penfold, A. R.
- Simonton, K. M., Mènière's symptom complex, III, 492.
- Simpson, C. A., Ellis, F. A., and Kirby-Smith, H., vitamin-D in treatment of acne, III, 674.
- Simpson, G. K. See Mitchell, S.
- Simpson, J. C. E., triterpene group. VI. Oxidation of β -amyrin benzoate; new route to the thio-compound, $C_{30}H_{44}OS$, II, 137.
See also Morice, I. M.
- Simpson, M. E. See Evans, H. M., Fraenkel-Conrat, H. L., Fraenkel-Conrat, J., Li, C. H., and Meambar, D. L.
- Simpson, O. C. See Estermann, I.
- Simpson, W. A. See Hamilton, W. F.
- Simpson, W. M. See Rose, D. L.
- Simon, F. W., and Strachan, A. S., experimental tissue reactions following intravenous injections of silica and other dusts, III, 683.
- Sinclair, H. M., neurological complications of pregnancy, III, 20. Determination of vitamin-B₁ in cerebrospinal fluid, III, 51. Clinical aspects of vitamin-B complex, III, 143. Determination of vitamin-B₁ in blood. II. Further modification of Meiklejohn's method, III, 144.
See also Goodhart, R.
- Sinclair, R. G., growth of rats on high-fat and low-fat diets deficient in the essential unsaturated fatty acids, III, 511. Exclusion of elaidic acid from phospholipins of testes and its uptake by other organs of rats, III, 733. Rate of turnover of phospholipins in kidney and liver, III, 742. Rate of turnover of lecithins and kephalins in liver, III, 742.
- Sindbjerg-Hansen, V. See Brandstrup, E.
- Singal, S. A., and Eckstein, H. C., supplementary proteins and amino-acids and dietary production of fatty livers in mice, III, 40.
- Singer, E., blood preservation, III, 878. Treatment of gas gangrene with sulphanilamide and related compounds, III, 920.
- Singer, G. See Taylor, L. S.
- Singer, J. See Weitz, E.
- Singer, J. H. See Pinder, J. L.
- Singer, K., lysolecithin fragility test, III, 469.
- Singer-Brooks, C., pertussis prophylaxis, III, 826.
- Singewald, Q. D., geology, mineralisation, and placers of Tarryall and Beaver Creeks, Park Co., Colorado, I, 422.
- Singh, B., and Rehmann, A., potentiometric studies in oxidation-reduction reactions. VIII. IX. Oxidation with chloramine-T, I, 371.
- Singh, B. K., and Barat, T. P., dependence of optical rotatory power on chemical constitution. XVII. Nitro- and carbonyl-aryl derivatives of stereoisomeric methylenecamphors, II, 255.
and Bhaduri, B., dependence of optical rotatory power on chemical constitution. XVI. Bromo- and iodo-aryl derivatives of stereoisomeric methylenecamphors, II, 255.
and Lal, A. B., difference in odour of *d*-, *l*-, and *dl*-derivatives of amino- and bisamino-methylenecamphors, II, 49. Dependence of physiological action on chemical constitution. I. Difference in odour of *d*-, *l*-, and *dl*-derivatives of amino- and diamino-methylenecamphor, II, 377. Dependence of optical rotatory power on chemical constitution. XVIII. Rotatory dispersion of stereoisomeric 3-nitro-*o*-toluidino-, 5-nitro-*o*-toluidino-, 2:3-tolylenediamino-, and 2:5-tolylenediamino-methylenecamphor, II, 377.
and Srinivasan, M. K., kinetics of mutarotation of hydroxymethylene-*d*-camphor. II, I, 443.
- Singh, B. N., scattering of light in Bose-Einstein and Fermi-Dirac gas, I, 55.
and Boyle, W., vitellogenesis of *Gasterosteus aculeatus*, III, 553.
- Mathur, P. B., and Mehta, M. L., catalase ratio as method of seed-testing, III, 615.
and Singh, M. P., diurnal change in carbohydrates in relation to constitution of leaves, III, 940.
- Singh, I., ions, drugs, and mammalian unstriated muscle, III, 568.
and Shah, M. J., intravenous oxygen, III, 794.
See also Rao, M. S.
- Singh, J. See Bhatnagar, S. S.
- Singh, M. P. See Singh, B. N.
- Singh, N., diet and nutrition in Orissa, III, 318.
- Singh, S. See Bahl, R. K.
- Singleton, F. G., and Pollard, C. B., reactions of aldehydes with amines. I. With *o*-aminophenol, II, 374.
- Sin-iké, T., origin of pigment in eye of chick embryo, III, 86.
- Siniramed, C. See Ubaldini, I.
- Sinkai, M. See Kitasato, Z.
- Sinma, K. See Yamasaki, F.
- Sinosaki, K. See Takei, S.
- Sinton, J. A., *Plasmodium ovale*. IV. Efficacy and nature of the immunity acquired as result of infections induced by sporozoite inoculations compared with those by trophozoite injections, III, 538. Effects of multiple inoculations with *Plasmodium ovale* on degree and nature of immunity developed, III, 610.
- Siplet, H. See Shay, H.
- Sirajuddin, K. See Khastgir, S. R.
- Siraj, B. C. R. See Basu, K. P.
- Sirkin, J. K., and Gubareva, M. A., activation energy and entropy of the transition state, I, 30.

- Sirkin, J. K. See also Gurjanova, E. N., Schott-Lvova, E. A., and Selivanova, A. S.
 Sirkina, K. See Schechter, A.
 Sirks, J. F. See Waterman, H. I.
 Sironi, L., electrical cataract from industrial current and from lightning, III, 573.
 Sirotinin, M. M., life at high altitudes, and mountain sickness, III, 550.
 Sisler, H. H., and Audrieth, L. F., action of liquid ammonia on sulphur trioxide addition compounds, I, 127. Preparation of sulphamic acid by the hydroxylamine-sulphur dioxide reaction, I, 128.
 Sisman, I. E. See Barnes, W. A.
 Sisoev, A. N., influence of a magnetic field on chemical reactions, and A. N. Schtschukarev's magneto-chemical effect, I, 75.
 Sissakjan, N. See Rubin, B. A.
 Sisson, W. A., X-ray studies of crystallite orientation in cellulose fibres. III. Fibre structures from coagulated cellulose, I, 246.
 Sistare, G. H., jun. See Thompson, M. de K.
 Sitgreaves, R. See Gatafer, W. M.
 Sitschkova, E. V. See Udovenko, V. V.
 Sivaramakrishnan, M. V., coating optical surfaces with aluminium, I, 234.
 Sivasubramanian, V. See Dover, C. W.
 Sivertz, V., Reitmeier, R. E., and Tartar, H. V., ionisation constant of monoethanolammonium hydroxide at 25° from electrical conductance measurements, I, 359.
 See also Reitmeier, R. E., and Tartar, H. V.
 Sivieri, F. See Rizzotti, G.
 Siwe, S. A., influence of citric acid milk on serum-calcium and -inorganic phosphorus, III, 883.
 Sizer, I. W., activation energy of urea hydrolysis catalysed by soya-bean urease, III, 260.
 and Gould, B. S., effect of temperature on aldehyde- and purine-dehydrogenase of milk, III, 447.
 Sizoo, G. J., and Barendregt, F., production of positive electrons by β -particles, I, 3.
 Eijkman, C., and Groen, P., secondary γ -radiation (retardation radiation) excited by β -particles of ^{32}P , I, 4.
 See also Barendregt, F.
 Sjögren, B. See Laudon, J.
 Sjöqvist, O., conduction of pain in the fifth nerve and its bearing on treatment of trigeminal neuralgia, III, 110.
 Sjollem, B., and Donath, W. F., vitamin-A, carotene, and xanthophyll content of yolk of hens' eggs, III, 592.
 Skaggs, L. S. See Allison, S. K.
 Skarżyński, B., dipeptidase actions of extracts of Jensen sarcoma and of rat muscle, III, 424.
 and Euler, H. von, deamination of *D*- and *L*-glutamic acid by sliced and pulped sarcoma and kidney, III, 859.
 Skau, E. L. See Bergmann, W.
 Skeeters, M. J. See Swaney, M. W.
 Skelding, A. D., and Winterbotham, J., structure and development of the hydathodes of *Spartina townsendii*, Groves, III, 614.
 See also Stiles, W.
 Skell, P. See Lehrman, A.
 Škerlj, B., gynecomastia in a 14-year-old boy, III, 622.
 Skerrett, N. P. See Thompson, H. W.
 Skinner, C. E., and Muller, A. E., cystine and methionine deficiency in mould-proteins, III, 860.
 Skinner, H. A., and Sutton, L. E., study of structures of inorganic pentahalide molecules in the vapour phase by electron diffraction, I, 312. Study of structures of bismuth chloride and bromide molecules in the vapour phase by electron diffraction, I, 312.
 Skinner, J. T. See Beyer, K. H.
 Sklar, A. L., near ultra-violet absorption of substituted benzenes, I, 6.
 Spomer, H., and Nordheim, G., comparison of the absorption spectra of gaseous and solid benzene, I, 386.
 Skljarenko, S. I., and Drushinina, O. S., decomposition potential of sodium pyrophosphate and niobium pentoxide dissolved in molten phosphate, I, 324.
 See also Melnikov, N. V.
 Skliarov, V. A., relative velocity of chloralkoxylation of olefines. II., I, 260. Preparation of ethers of chlorohydrins. I., II, 150.
 Sklow, J. See Sulman, F.
 Skobeltzyn, D. V., and Vernov, S. N., soft component of cosmic radiation in connexion with problem of mesotron disintegration, I, 279.
 Skobetz, E. M., and Kavetzi, N. S., e.m.f. of Daniell's cells in molten salts, I, 295.
 Skoda, J. See Gault, H.
 Skoog, F., bud inhibition by indolylacetic acid, III, 460.
 and Thimann, K. V., enzymic liberation of auxin from plant tissues, III, 830.
 Skopintzev, B. A., diurnal variation in dissolved oxygen and pH of natural water basins, I, 332. Hydrochemical regime of the ice-covered Volga river in connexion with the death of fish observed during winter 1939, I, 332.
 Skrabal, A., alkaline saponification of polyvinyl acetate, I, 223. Theory of prototropic and protolytic changes, I, 326.
 Skrabal, R., velocity of hydrolysis of ethers, I, 121.
 Skrinnikova, G. N. See Jurshenko, A. I.
 Slack, F. G. See Ingersoll, L. R.
 Sládek, J., and Bálint, J., biochemistry of growth [of uterus], III, 660.
 Slätis, H., calculation of absorption by the Drude-Coolidge method, I, 10, 97.
 Slanetz, C. A. See Curth, H. O.
 Slansky, C. M., heats of solution of alkali halides and of hydrogen chloride in water-methyl alcohol solutions at 25°, I, 441.
 See also Latimer, W. M.
 Slater, E. C. See Cunningham, M. M.
 Slater, J. C., diamagnetism of small regions and the superconducting state, I, 200. Grüneisen's constant for the incompressible metals, I, 288. Effect of pressure on the Curie point of iron-nickel alloys, I, 355.
 Slatineanu, A., Balteanu, L., Potop, L., and Franche, M., polypeptides in blood and cerebrospinal fluid in typhoid fever and anthrax in man, III, 560.
 Slaughter, D., and Gross, E. G., morphine action; effect on intestine and blood pressure; toxicity studies, III, 337.
 and Munsell, D. W., morphine action; effects on pain, III, 337.
 Slaughter, E. C., experimental hyperparathyroidism and otosclerosis, III, 492.
 Slaughter, R. F. See Hamilton, W. F.
 Slavich, E., and Risolo, A., diameter of lung capillaries in subjects of varying age, III, 16.
 Slavin, M., iron arc as a standard source for spectrochemical analysis, I, 271. Prism versus grating for spectrochemical analysis, I, 330.
 Slavutskaja, I. M. See Gorenbein, E. J.
 Slawsky, M. M., and Crane, H. R., absorption of high-energy electrons. IV., I, 89.
 Slawson, C. B. See Kraus, E. H.
 Sleeth, C. K., and Van Lier, E. J., size of spleen and adrenals during pregnancy and puerperium, III, 213. Emptying time of human stomach after administration of progesterin, III, 414.
 See also Van Lier, E. J.
 Sleggs, G. F., significance of diploidy and crossing-over (theory of differential periodicity), III, 875.
 Slepyan, A. H. See Cornbleet, T.
 Slevogt, H., dispersion curves of Jena glass between 400 and 800 $\text{m}\mu$ and their representation by the Hartmann interpolation formula, I, 289.
 Slevogt, K. E., dispersion and absorption of electric waves in alcohols and aqueous solutions, I, 97.
 Slight, D. See Pfeiffer, C.
 Slinger, F. H. See Haworth, R. D.
 Sliv, L. A., shape of β -ray spectra and mass of the neutrino, I, 6.
 Sloane, A. E. See Oak, L.
 Sloane, N. G. See Loewenberg, S. A.
 Sloane, R. H. See Emeleus, K. G.
 Slobod, R. L. See Dole, M.
 Slobodin, J. M., isomerisation of allene hydrocarbons in presence of silicates. VII. Phenylallene, II, 39.
 Slocum, G. G., and Linden, B. A., food poisoning due to staphylococci; staphylococcus agglutination by normal horse serum, III, 158.
 Slome, D. See O'Shaughnessy, L.
 Slooff, A., determination of chlorine, bromine, and iodine in organic compounds by hydrogenation, II, 239.
 and Duyn, D. van, quantitative separation of chloride, thiocyanate, and cyanide and a qualitative reaction for detecting chloride in potassium thiocyanate, I, 173.
 Slutzky, B., and Wilhelmj, C. M., phenolphthalein as test for gastro-intestinal ulceration in experimental animal, III, 36.
 Smadel, J. E., Baird, R. D., and Wall, M. J., soluble antigen of lymphocytic choriomeningitis. I. II. Characteristics of the antigen and its use in precipitin reactions, III, 267, 268.
 Rivers, T. M., and Pickels, E. G., estimation of purity of preparations of elementary bodies of vaccinia, III, 455.
 and Swift, H. F., effect of prolonged administration of sulphanilamide on rats with nephrotoxic nephritis, III, 152.
 See also Farr, L. E.
 Smakula, A., increase of light intensity in optical apparatus, I, 301.
 Smale, L. E. See Schechtman, A. M.
 Small, A. B. See Metz, M. H.
 Small, A. J. See Bell, G. H.
 Small, L., Faris, B. F., and Mallonee, J. E., halogeno-morphides and -codides and the mechanism of the morphine- α -morphine transformation, II, 333.

- Small, L., and Mallonee, J. E., structure of acetocodeine, II, 316. Deoxycodine studies. VI. Deoxycodine-D (deoxynopine), II, 334.
- Small, R. See Hoskins, R. G.
- Small, R. R. See Looney, J. M.
- Smekal, A., relations between viscosity and elasticity of amorphous substances, I, 18. Strength of quartz glass, I, 200.
- Smelser, G. K., effect of thyroidectomy on reproductive system and hypophysis of adult male rat, III, 122.
- Smereker, H., radium dosimetry, III, 530.
- Smetana, H., photo-oxidation of blood plasma and tissues in buckwheat disease, III, 96.
- Smialowski, M., preparation of large single crystals of metals, I, 227. Mosaic structure of metal crystals, I, 285.
- Smirnov, E. A., separated auxo-enoid systems. X. Colour phenomena of nitro-cinnamoyl derivatives of arylamines, II, 252.
- Smirnov, L. V., and Solntzeva, V. A., effect of foreign substances on stability of aerosols, I, 439.
- Smirnova, A. D. See Schestakov, V. E.
- Smirnova, M. I., and Katanskaja, G. A., determination of hydrocyanic acid in sorghum, III, 461.
- See also Moschkov, B. S.
- Smit, W. M., apparatus for determination of melting trajectory of small amounts of substance, I, 42.
- Smith, A. See Bagnall, D. J. T.
- Smith, A. E. See Boyd, E. M.
- Smith, A. de G., and Owens, N. A., treatment of ricket with minimal viosterol dosage, III, 430.
- Smith, A. H., and Meyer, C. E., influence of diet on endogenous production of citric acid, III, 58.
- Orten, J. M., Johnston, C. G., and Bauguess, L. C., site of formation of citric acid in dog, III, 240.
- See also Kuether, C. A., and Meyer, C. E.
- Smith, A. M., and Gillies, J., distribution and concentration of ascorbic acid in potato (*Solanum tuberosum*), III, 916.
- Smith, A. R., silicosis from a dental laboratory, III, 257.
- and Burke, W. J., non-offset solutions in printing; allergy to gum arabic reported, III, 684.
- See also Greenburg, L.
- Smith, B., and Grishaw, W. H., various insulins in diabetes, III, 898.
- See also Grishaw, W. H.
- Smith, B. F. See Williams, R. D.
- Smith, C. A. H. See McCay, C. M.
- Smith, C. C., embalming large insects, III, 84.
- See also Tashiro, S.
- Smith, C. G., Mettler, F. A., and Culler, E. A., phasic response to cortical stimulation, III, 571.
- Smith, C. H., adsorption of methylene-blue by blood of infants and children; mechanism of reaction and clinical application, III, 95. Treatment of pneumonia in infants and children, III, 520. Anæmias of early infancy, III, 556.
- and Johnson, H. B., treatment of acute stomatitis [with chromium trioxide], III, 928.
- and Nemir, R. L., sulphapyridine in pneumonia of children, III, 244.
- Smith, C. L. See Murrell, E. B. M.
- Smith, Charles Linton, Hamilton, J., Thor, C. J. B., and Romberg, L. D., root composition and top development in large pecan trees headed to various degrees of severity in top working, III, 80.
- See also Thor, C. J. B.
- Smith, Clayton S. See Ruggy, G. H.
- Smith, Cyril S., structure and ferromagnetism of cold-worked copper containing iron, I, 200.
- Smith, D. C., and Perman, J. M., effect of thyroxine with carotene on oxygen consumption of cats, III, 725.
- Smith, D. M., Bryant, W. M. D., and Mitchell, J., jun., analytical procedures employing Karl Fischer reagent. IV. Determination of acid anhydrides, II, 241.
- See also Bryant, W. M. D.
- Smith, D. P., phase segregation and its relation to the properties of the system palladium-hydrogen, I, 321.
- and Barrett, C. S., arrangement of phases in palladium-hydrogen, I, 437.
- Smith, D. T., Margolis, G., and Margolis, L. H., blacktongue curative effect of pyridine- β -carboxyldiethylamide (coramine), III, 594.
- Smith, D. W. See Kampmeier, R. H.
- Smith, E., Evelyn, K. A., and Nolan, J. F., anuria caused by sulphapyridine therapy, III, 247.
- Smith, E. C., yellow fever immune bodies in sheep sera, III, 937.
- Smith, (Miss) Elizabeth C. See Magee, J. L.
- Smith, E. C. B., anserine in muscle: possibility of determination by titration, III, 390.
- See also Keilin, D.
- Smith, E. C. W., emission spectrum of hydrocarbon flames, I, 166.
- Smith, E. L., chlorophyll as the prosthetic group of a protein in the green leaf, III, 549.
- and Pickels, E. G., micelle formation in aqueous solutions of digitonin, I, 357.
- See also Chase, A. M.
- Smith, E. R., b.p. of *n*-heptane and $\beta\beta$ -trimethylpentane over the pressure range 100–1500 mm., I, 289.
- See also Sullivan, M. X.
- Smith, E. R. B., and Smith, P. K., thermodynamic properties of solutions of amino-acids and related substances. IV. Effect of increasing dipolar distances on activities of aliphatic amino-acids in aqueous solution at 25°. V. Activities of hydroxy- and *N*-methylamino-acids and proline in aqueous solution at 25°. VI. Activities of peptides in aqueous solution at 25°, I, 163, 412.
- Smith, F., relative values of different essential phases in white cell and differential count in diagnosis of appendicitis, III, 183.
- Smith, Fred, constitution of arabic acid. II. Degraded arabic acid, II, 5.
- See also Haworth, W. N., and Jackson, J.
- Smith, F. J., and Needles, R. J., report of 50 cases of acute lobar pneumonia in adults treated with sulphapyridine, III, 244.
- Smith, F. P. See Lawrence, J. S.
- Smith, F. W. G., atropine in optic atrophy, III, 574.
- Smith, G. B. L. See Jackson, J.
- Smith, G. C. See Riddle, O.
- Smith, G. Frederick, Frank, G., and Kott, A. E., cerate oxidimetry; electrolytic oxidation of cerium without the use of a diaphragm cell, I, 367.
- and Getz, C. A., cerate oxidimetry; preparation and stability of solutions, I, 373.
- See also Duke, F. R.
- Smith, Gilbert F., refractivity of formamide, I, 347. Periodic phenomena in evaporation of solutions, I, 411.
- Smith, G. H., antigenic patterns in human sera: race-specific antigens, III, 95.
- Smith, G. M. See Bergmann, W., Gardner, W. U., and Strong, L. C.
- Smith, G. McPhail. See Haendler, H. M.
- Smith, G. R. See Dyer, W. J.
- Smith, G. S. See Don, C. S. D.
- Smith, G. Stanley, determination of manganese by means of 8-hydroxyquinoline in presence of magnesium, I, 39.
- Smith, G. Van S., and Jones, E. E., attempt to modify growth, development, and tumour incidence in mice with thymus gland extracts, III, 509.
- See also Huffman, M. N., and Smith, O. W.
- Smith, H. See Lonsdale, K.
- Smith, H. A. See Delafield, M. E.
- Smith, Hilton A., acid-catalysed esterification of aliphatic acids, I, 326.
- and Napravnik, A., photochemical oxidation of hydrogen, I, 226.
- See also Levenson, H. S.
- Smith, H. G. See Elson, R. G.
- Smith, H. H. See Hume, E. M.
- Smith, H. L., and Boland, E. W., quinidino and strychnine in auricular fibrillation, III, 62.
- See also Craig, W. McK.
- Smith, H. P., and Owen, C. A., absorption of water-soluble vitamin-K without the aid of bile salts, III, 752.
- Ziffren, S. E., Owen, C. A., and Hoffman, G. R., vitamin-K [and blood clotting], III, 10.
- See also Brinkhous, K. M., Mertz, E. T., Tidrick, R. T., Warner, E. D., and Ziffren, S. E.
- Smith, H. S. See Powell, L. S.
- Smith, H. V. See Smith, M. C.
- Smith, H. W., studies in the physiology of the kidney, III, 276.
- See also Smith, W. W.
- Smith, I. A. See Garry, R. C.
- Smith, J. A., local treatment with prontosil soluble, III, 862.
- Smith, J. A. B., and Dastur, N. N., secretion of milk fat. III. Effect of thyroxine on blood-lipins and nature of milk fat, III, 740.
- Smith, J. C. See Grimshaw, D. C.
- Smith, J. F. See Card, W. I.
- Smith, J. J. See Stewart, H. J.
- Smith, J. M. See Mack, P. B.
- Smith, J. O., jun. See Taylor, H. S.
- Smith, J. R., Kountz, W. B., and Gilson, A. S., jun., extravascular elements in first heart sound, III, 564.
- See also Day, R.
- Smith, J. W. See Arcus, C. L.
- Smith, K. E. See Paddock, F. K.
- Smith, K. M., and Curtis, A. C., brucellosis with endocarditis [failure with sulph-anilamide], III, 245.
- Smith, K. U., and Warkentin, J., central neural organisation of optic functions related to minimum visible acuity, III, 25.
- Smith, L. See West, P. W.

- Smith, L. C., death following benzedrine sulphate, III, 64.
- Smith, L. E. See Gersdorff, W. A.
- Smith, L. I., Hoehn, H. H., and Whitney, A. G., vitamin-E. XXIII. Synthesis of 5-hydroxy-2:4:6:7-tetra- and -2-methyl-coumaran; oxidation products of the tetramethylcoumaran, II, 313.
- and Horner, J. W., jun., polymethylbenzenes. XXVI. Nitration of bromopentamethylbenzene, II, 301.
- Irwin, W. B., and Ungnade, H. E., structure of the red oxidation products of tocopherols and related substances, II, 102. Vitamin-E. XXI. Dealkylation of hydroquinone ethers related to the tocopherols, II, 102.
- and Kaiser, E. W., reaction between quinones and metallic enolates. X. Trimethyl[benzo]quinone and enolates of β -diketones. XI. Duroquinone and the enolates of cyanoacetic ester and of β -diketones, II, 101.
- and Prichard, W. W., 3:3:5:6:7-pentamethylhydrindone and 4:4:5:6:8-pentamethylhydrocarbostyryl, II, 224. Polymethylbenzenes. XXV. Reaction between dimethylacrylic acid and the trimethylbenzenes, II, 224. Nitration of β -3:4:5-trimethylphenylisovaleric acid and its methyl ester. I. Formation of 5-nitro-4:4:6:7:8-pentamethyl-dihydrocoumarin, II, 230.
- and Ruoff, P. M., vitamin-E. XXII. Reaction between Grignard reagents and coumarins and hydrocoumarins, II, 102.
- Ungnade, H. E., Lauer, W. M., and Leekley, R. M., vitamin-E. XIX. Alkenylation of phenol with δ -chloro- and δ -bromo- Δ^8 -hexene; rearrangement of the phenyl ether, II, 13.
- Ungnade, H. E., Stevens, J. R., and Christman, C. C., vitamin-E. XVIII. Condensation of phenols and quinols with allylic alcohols, allylic halides, and conjugated dienes, II, 20.
- See also Emerson, O. H., and Evans, H. M.
- Smith, L. T., and Claborn, H. V., lactic esters: preparation and properties, II, 243.
- See also Claborn, H. V.
- Smith, L. W., pathological changes observed in human [tumour] tissues subjected to sub-critical temperatures, III, 816.
- and Fay, T., temperature factors in cancer and embryonal cell growth, III, 46. Human beings with cancer, maintained at reduced temperatures of 75–90° F, III, 509.
- Morgan, I. M., and Mudd, S., histopathological changes in rabbits by experimental inoculation with hæmolytic streptococci, certain of their component factors, and saponin, III, 612.
- Smith, M. C., and Smith, H. V., durability of mottled teeth, III, 910.
- See also Ochsner, A., and Otis, L.
- Smith, M. E., Tuthill, E., Drew, C. R., and Scudder, J., blood preservation; effects of carbon dioxide, III, 558.
- See also Mason, H. G.
- Smith, M. G. See Agress, H.
- Smith, M. I. See Lillie, R. D., and Westfall, B. B.
- Smith, M. L., stability of standard diphtheria antitoxin at different temperatures, III, 453. Stability of staphylococcus α -antitoxin at different temperatures, III, 454.
- Smith, N. M., jun. See Allison, S. K.
- Smith, N. O. See Hill, A. E.
- Smith, O. W., and Smith, G. Van S., menstrual discharge of women. I. Toxicity to rats. II. Progesterone-stimulating effect in mature rats, III, 738.
- Smith, G. Van S., and Schiller, S., cestrogens of urine from women, III, 213.
- See also Huffman, M. N.
- Smith, P. B., recording optical manometer for transient pressures, I, 446.
- Smith, P. G. See Riegel, B.
- Smith, P. K., prolonged administration of large doses of acetanilide in monkeys with special reference to blood changes, III, 337. Effects of sulphanilamide and sulphapyridine on blood pigments of white rats, III, 791.
- Winkler, A. W., and Hoff, H. E., calcium and digitalis synergism, III, 62. Electrocardiographic changes and concentration of magnesium in serum following intravenous injection of magnesium salts, III, 98. Cardiovascular changes following the intravenous administration of barium chloride, III, 336.
- See also Hoff, H. E., Smith, E. R. B., Wentworth, J. H., and Winkler, A. W.
- Smith, R. A., sensitive automatic pressure control device, I, 273. Condensation of phenol and ethylene oxide, II, 216.
- Smith, R. D., and Starkey, W. F., age changes in thyroid of mouse, III, 894.
- Smith, R. E., effect of substitution on thermal decomposition of gaseous benzaldehyde, I, 414.
- and Hinselwood, C. N., thermal decomposition of gaseous benzaldehyde, I, 259.
- Smith, R. G., assay of ergot, III, 927.
- Mukerji, B., and Seabury, J. H., thiocyanate formation in cyanide poisoning as affected by methylene-blue and sodium nitrite, III, 527.
- Smith, R. L. See Ritchie, M.
- Smith, R. M., and Rubinstein, B. B., adolescence of [female] macaques, III, 660.
- See also Marble, A.
- Smith, R. P. See Cochrane, W. J.
- Smith, Rodney P. See Burlew, J. S.
- Smith, S., treatment of malaria in military population with synthetic preparations, III, 332.
- Risk, R., and Beck, C., warm moist air therapy for burns, III, 683.
- Smith, S. E. See McCay, C. M.
- Smith, S. G., and Martin, D. W., cheilosis successfully treated with vitamin-B₆, III, 751.
- Smith, S. H. See Baudisch, O.
- Smith, T. See Jackson, R. L.
- Smith, W. See Harris, C. H. S.
- Smith, W. H., histological structure of apple flesh in relation to growth and senescence, III, 940.
- Smith, W. J. See Benning, A. F.
- Smith, W. R. See Hovorka, F.
- Smith, W. W., excretion of phenol-red in dogfish, III, 224.
- Finkelstein, N., and Smith, H. W., renal excretion of hexitols (sorbitol, mannitol, and dulcitol; and their derivatives (sorbitan, isomannide, and sorbide) and of endogenous creatinine-like chromogen in dog and man, III, 917.
- Smithson, F., statistical methods in sedimentary petrology. I. Percentage composition of [heavy mineral] assemblages and their graphical study. II. Grain-size measurements and their graphical study. III. Cartographic methods, I, 85.
- Smolens, J. See Sevag, M. G.
- Smoluchowski, R. See Dryniski, T.
- Smorodincev, I. A., and Bebeschin, K. V., lipins of *Tæniarthynchus saginatus*, III, 140.
- and Shigalov, V. P., enzymic hydrolysis of muscle-proteins, III, 72. Rate of enzymic hydrolysis of proteins, III, 347. Kinetics of hydrolysis of muscle-protein by hydrochloric acid, III, 567.
- Smukler, M. E., registering deviometer; instrument to measure degree of squint, III, 114.
- Smyta, G. S. See Gillman, J.
- Smyth, C. P., Grossman, A. J., and Ginsburg, S. R., dipole moments and structures of chlorine compounds of germanium, chromium, selenium, and tellurium, I, 97.
- and Lewis, G. L., dipole moment, induction, and resonance in tetra-, penta-, and hexa-substituted benzenes, I, 244. Solubility and molecular rotation of tetra-, penta-, and hexa-substituted benzenes, I, 251.
- Lewis, G. L., Grossman, A. J., and Jennings, F. B., dipole moments and structures of compounds of sulphur, selenium, and phosphorus, I, 311.
- See also Brooker, L. G. S., Lewis, G. L., and Turkevich, A.
- Smyth, D. H., oxidation of pyruvate by heart muscle, III, 713.
- See also Chute, A. L., and Krebs, H. A.
- Smyth, G. E. See Reise, W.
- Smythe, J. A., lead etching effect, I, 298.
- Smythe, W. R. See Townes, C. H.
- Snapp, E. See Berman, A. L.
- Snapper, I., Chin, K. Y., and Liu, S. H., liver degeneration following neoarsphenamine and mapharsen treatment, III, 526.
- and Grünbaum, A., oxidation of phenylpropionic acid and its higher homologues in isolated dog's kidney, III, 822.
- Yü, T. F., and Chiang, Y. T., cinnamic acid metabolism in man, III, 755.
- Sneed, M. C. See Maynard, J. L.
- Snell, A. M., Butt, H. R., and Osterberg, A. E., treatment of hæmorrhagic tendency in jaundice, with special reference to vitamin-K, III, 10.
- See also Brugsch, T., Butt, H. R., and Foley, M. P.
- Snell, E. E., Eakin, R. E., and Williams, R. J., quantitative test for biotin; its occurrence and properties, III, 449.
- Pennington, D., and Williams, R. J., effect of diet on pantothenic acid content of chick tissues, III, 595.
- and Strong, F. M., effect of riboflavin and synthetic flavins on growth of lactic acid bacteria, III, 687.
- and Williams, R. J., biotin as a growth factor for the butyl alcohol-producing anaërobes, III, 262.
- See also Krauskopf, E. J., Mitchell, H. K., Pennington, D., Stanbery, S. R., and Williams, R. J.
- Snell, F. D. See Epstein, S. S.

- Snell, G. D., Fekete, E., Hummell, K. P., and Law, L. W., relation of mating, ovulation, and oestrous smear in house mouse to time of day, III, 738.
See also Fekete, E.
- Snelling, C. E., plasma-ascorbic acid of infants and children, III, 381.
- Snethlage, H. C. S., influence of solvent and temperature on speed of oxidation of organic substances by chromic acid, II, 1, 222.
- Snider, G. G. See Hoagland, R.
- Snider, R. S., morphology of cerebellar nuclei in rabbit and cat, III, 717.
- Snieszko, S. F. See Kleczkowska, J.
- Snively, D. See Rockwern, S. S.
- Snook, L. C., fatty liver in pregnant ewes, III, 221.
See also Fraser, A. H. H.
- Snook, T., preservation of trypan-blue and neutral-red within cells of loose connective tissue, III, 88.
- Snorri, L. D. See Croft, J. D.
- Snow, J. S. See Green, M. E., and Wile, U. J.
- Snow, R., inhibitor of growth extracted from pea leaves, III, 175. Second factor involved in inhibition by auxin in shoots, III, 617. Hormone for correlative inhibition, III, 776.
- Snow, W., and Rosensohn, M., X-ray appearances of soft tissues in pregnancy, III, 621.
See also Weintraub, S.
- Snyder, F. F., and Coteen, H., hormonal induction of abortion, III, 127.
- Snyder, F. H. See Humoller, F. L.
- Snyder, G. A. C., spontaneous double rupture of heart, III, 632.
- Snyder, H. See Oppenheimer, J. R.
- Snyder, H. R., Cohen, Harry, and Tapp, W. J., reaction of anils. IV. Reactions of benzylidene- and cinnamylidene-aniline with methyl acetylenedicarboxylate, II, 87.
- Hasbrouck, R. B., and Richardson, J. F., reactions of anils. III. New type of Diels-Alder reaction, II, 87.
- Kornberg, H. A., and Romig, J. R., reactions of anils. II. Addition of methyl ketones to benzylideneaniline in presence of boron fluoride, II, 90.
- Snyder, T. M., and Shaw, C. H., fine structure of the X-ray absorption limits of bromine and chlorine, I, 305.
- Snyder, W. C. See Hansen, H. N.
- So, D. See Tsuda, K.
- Soaje Echagüe, E., effect of veratrine on action current of heart, III, 290.
- Soal, S. G. See Carington, W. W.
- Soares, M. See Jacobsohn, K. P.
- Sobel, A. E., and Kaye, I. A., determination of sub-micro-quantities of calcium, I, 232, 372.
- Yuska, H., Peters, D. D., and Kramer, B., biochemical behaviour of lead. I. Influence of calcium, phosphorus, and vitamin-D on lead in blood and bone, III, 335.
- Sober, H. A., Lipton, M. A., and Elvehjem, C. A., thiamin and citric acid metabolism, III, 818.
See also Axelrod, A. E.
- Sobotka, H., Bloch, E., and Rosenbloom, A. B., urinary cholesterol in cancer, II, III, 509.
See also Baehr, G.
- Sodeman, W. A., Addison's disease, III, 306. Cardiospasm or achalasia of oesophagus, III, 309. Anæmia in pregnancy, III, 703.
- Sodeman, W. A., and Engelhardt, H. T., QRS pattern of diagnostic value in electrocardiogram, III, 884.
See also Burch, G. E.
- Söfge, K. H., Heimbrecht, M., and Biltz, W., affinity. XCII. Iridium phosphides, I, 294.
- Soehring, K., preparation of proteins from diphtheria bacilli, III, 168.
- Sörensen, N. A., Stene, J., and Samuelsen, E., steric course of dimerising reductions, II, 216.
See also Kuhn, R.
- Sogabe, T. See Satoh, S.
- Sognnaes, R. F., oral conditions of children in relation to state of general health and habits of life, III, 910.
- Sohn, A. W. See Staudinger, H.
- Sohval, A. R. See King, F. H.
- Sokhey, S. S., and Dikshit, B. B., 2-N'-sulphanilamidothiazole in plague infection, III, 677. Sulphathiazole in bubonic plague, III, 861.
and Malandkar, M. A., basal metabolism of Indians, III, 326.
- Sokolik, A., explosion ranges of gaseous mixtures. VI. Influence of temperature on limits of detonation of hydrogen-air mixtures, I, 29.
See also Jantovski, S.
- Sokoloff, N. H. See Viehoveer, A.
- Sokolov, A. See Ivanenko, D.
- Sokolov, I., effect of colchicine on spermatogenic mitosis in Orthoptera, III, 156.
- Sokolov, I. I., electrochemical properties of lyophilic colloids. III. Mobilities of ions of gelatin fractions, I, 439.
See also Liepatov, S. M.
- Sokolov, M., Katz, L. N., and Muskovitz, A. N., electrocardiogram in pulmonary embolism, III, 631.
See also Rodbard, S.
- Sokolov, V. A., equilibria in the system carbamide-ammonium nitrate-water, I, 27. Transformations of carbamide of a higher order, I, 406.
- Sokolova, A. I. See Kretovitsch, V. L.
- Sokoray, L., and Czimmer, A. G., action of quercitrin on blood content of abdominal organs, III, 153.
- Solacolu, T., Constantinesco, D., and Iliesco, C., action of *cis*-cinnamic acid on plant cells, III, 272.
- Solandt, D. Y., and Best, C. H., rôle of dietary choline in neurohumour production [response to vagal stimulation], III, 20. Heparin and blood clotting, III, 789.
- Nassim, R., and Cowan, C. R., hypertensive effect of blood from hypertensive dogs, III, 711.
See also Best, C. H.
- Solandt, O. M. See Feldberg, W.
- Soley, M. H. See Althausen, T. L., Hamilton, J. G., and Shock, N. W.
- Soliman, G., quinovic acid from *Zygo-phyltum coccineum*, L., III, 83.
- Solis-Cohen, L., and Steinbach, M., sporadic congenital goitre causing death of infant, III, 497.
- Solkot, R. See Clarke, F.
- Soll, S. N. See Edmondson, H. A.
- Sollazzo, G., variations in the b.p. and f.p. of substances in the regions of East Africa higher than 2000 m. above sea-level, I, 204.
- Solmssen, U. V. See Foster, R. H. K.
- Solntzeva, V. A. See Smirnov, L. V.
- Solodkowska, W., thermochemical studies of velocity of corrosion of iron and of steel, I, 223.
- Soloduschenkov, S. N. See Schilov, E. A.
- Sologub, I. See Malenok, N. M.
- Solomides, J., effect of adrenocortical extract on development of tubercle bacilli *in vitro*, III, 305. Toxic action of glycerol on normal and tubercular guinea-pigs, III, 337. Degeneration of *B. tuberculosis* by the addition of arachis oil to cultures on potato in glycerinated broth, III, 689.
- Solomon, H. A., Weiss, A., and Hochstein, E., clinical classification of hypothyroidism, III, 726.
- Solomon, J., neutral mesotrons and electron pairs, I, 54. Mass of the neutrino. II, I, 92. Theory of the deuteron, I, 242.
- Solomon, P. See Jasper, H. H.
- Solomon, R. Z., Hald, P. M., and Peters, J. P., state of inorganic components of human red blood cells, III, 375.
- Solomon, S. See Beilly, J. S.
- Solomonik, R. E. See Katz, M. L.
- Soloviev, V. E. See Landsberg, G. S.
- Soloway, D., Hansen, L. P., and McCahey, J. F., penetration of sesame oil painted on capon comb, III, 131.
- Solway, L. J., and Pritzker, H. G., sulph-anilamide in treatment of bacterial endocarditis, III, 242.
- Solza, A. See Freri, M.
- Someno, R. See Ishikawa, S.
- Somerfeld-Ziskind, E., and Ziskind, E., effect of phenobarbital on mentality of epileptic patients, III, 721.
- Somerford, A. E., nutritional anæmia: survey of debilitated children in Manchester, III, 671.
- Somkin, E. See Friedman, B.
- Sommer, G., atrophy of testis after removal of rectum, III, 901.
- Sommer, H. See Külz, F.
- Sommer, K., treatment of hormonal deficiencies, III, 493. Feer's disease; infantile acrodynia, III, 890.
- Sommerfeld, A., dimensions of electromagnetic magnitudes, I, 99.
- Sommers, H. S., jun. See Oldenberg, O.
- Somogyi, J. C., rôle of the sympathetic nervous system in blood regeneration, III, 89.
See also Verzár, F.
- Somogyi, M., saccharogenic action of diastase on basis of substrate competition, III, 766. Blood-diastase in health and diabetes, III, 766.
See also Taussig, A. E., and Weichselbaum, T. E.
- Sondern, C. W., Pugh, A. E., Kalich, F. V., Lann, G., and Wiegand, C. J. W., potassium bismuth saccharate. II. Toxicity, absorption, and distribution after intramuscular injection, III, 927.
and Sealey, J. L., comparative oestrogenic potency of diethylstilbestrol, oestrone, oestradiol, and oestriol, III, 903.
See also Sealey, J. L.
- Sonn, A. [with Neumann, E., and Brehmer, E.], pyrrolines, II, 140.
- Sonnenberg, See Büsemaier, J.
- Sonnichsen, H. M. See Kohler, E. P.
- Sonntag, G. See Thivolle, L.
- Sons, E., types of congestion in patients with right ventricular failure, III, 474.
- Sontag, L. W., and Comstock, G., striæ in bones of a set of monozygotic triplets, III, 2.

- Sontag, L. W., and Harris, L. M., evidences of disturbed prenatal and neonatal growth in bones of infants aged one month. II. Contributing factors, III, 177.
- Soong, H. Y., assay of insulin in pancreas in rats receiving anterior pituitary extract, III, 807.
- Soostmeyer, T. See Kayserling, H.
- Soper, H. R. See Elliott, D. F., and Kon, G. A. R.
- Soper, H. W., phenolphthalein [as laxative], III, 63.
- Sorgato, I., practical photocolorimetry of high sensitivity, I, 175. Photo-electric effect and applicability to chemical analysis, I, 235.
- Sorge, J. See Mohler, W.
- Sorkin, S. Z. See Thannhauser, S. J.
- Sorokina, N. T. See Korenman, I. M.
- Soroos, H., lead-sodium alloy as a drying agent, I, 134.
- See also Calingaert, G.
- Sorsby, A., dystrophies of macula, III, 892.
- and Oliver, J. O., macular coloboma: histological report, III, 115.
- Sorsky, E. D. See Weisengreen, H. H.
- Soru, E., and Combiesco, C., chemical properties of typhoid antigens, III, 542.
- See also Combiesco, C.
- Sorum, C. H. See Fisher, E. D., Glasoe, P. K., Johnson, E. R., and Throckmartin, C. L.
- Sorzka, S. See Dux, K.
- Sosa, A., and Sosa-Bourdouil, C., comparison of the macro- and micro-spores of *Selaginella*, III, 367.
- Sosa-Bourdouil, C. See Sosa, A.
- Sosa Gallardo, J. B. See under Gallardo, J. B. S.
- Sosedko, A. F., mineralogy of the Ilmen Mountains, I, 45. Genesis of the Tamda emery deposits, I, 239.
- Sosinski, S., internal field and time of relaxation, I, 148.
- Soskin, S., liver and carbohydrate metabolism, III, 433.
- and Bernheimer, L. B., mechanism of oestrogen effect on nasal mucosa in atrophic rhinitis; successful treatment with prostigmine, III, 215.
- and Hyman, M., intravenous glucose therapy of liver disease, III, 312.
- Levine, R., and Lehmann, W., influence of pituitary on carbohydrate metabolism, III, 405.
- Levine, R., and Taubenhaus, M., effect of added glucose on rate of appearance of free sugar in liver brei, III, 416. Validity of chemical balance studies in eviscerated animals as index of carbohydrate utilisation, III, 754.
- Wachtel, H., and Hechter, O., prostigmine and delayed menstruation, III, 809.
- See also Freed, S. C., Hechter, O., Howell, K. M., Rosenberg, D. H., and Taubenhaus, M.
- Sosnovski, T. A. See Kogan, I. M.
- Soth, G. C., and Ricci, J. E., volumetric determination of selenate, I, 370.
- See also Hill, A. E.
- Sotiriadou, E., value of Campbell staining method with benzidine [for study of ovaries], III, 649.
- Souder, C. G. See Peller, S.
- Souders, H. J., Hunscher, H. A., Hummel, F. C., and Macy, I. G., influence of fluid and evaporated milk on mineral and nitrogen metabolism of growing children, III, 672.
- See also Macy, I. G.
- Souèges, R., embryology of Oxalidaceae; development of the embryo in *Oxalis corniculata*, L., III, 172.
- Soula, C. See Baisset, A.
- Soule, M. H. See Kempf, J. E.
- Souter, A. W., Kark, R., and Taylor, F. H. L., stable thromboplastin for use in Quick's prothrombin test, III, 706.
- See also Kark, R.
- Southard, J. C., heat of hydration of calcium sulphates, I, 218.
- Sonthwick, W. E., time and stage in development at which factors operate to produce mongolism, III, 178.
- Spacu, G., and Drăgulescu, C., potentiometric study of the formation of a double thallium silver arsenate, I, 119. Potentiometric titration of the arsenic ion with potassium iodide and sodium thiosulphate, I, 130. Potentiometric titration of the stannous ion with potassium iodate, I, 132. Potentiometric titration of the antimonious ion by means of potassium iodide and sodium thiosulphate, I, 132.
- and Macarovici, C. G., class of amines containing 8-hydroxyquinoline and 5:7-dibromo-8-hydroxyquinoline, I, 129.
- and Nicolaescu, V., constitution of heteropoly-acids. II. Complex phosphododecatungstates, I, 127.
- and Pop, A., new class of amines; complex thioarsenates, I, 128.
- and Popper, E., atomic refraction of sulphur from inorganic compounds (refractometric measurements), I, 16.
- and Spacu, P., two new compounds: silver thallium phosphate and arsenate, I, 125.
- and Voichescu, P., higher ammoniates of complex compounds; tensimetric determinations, I, 230.
- Spacu, P. See Spacu, G.
- Spacu, P. G., complex vanadates, I, 128. Specific microchemical reaction for the cupric ion, I, 131. Electrometric determination of thiolbenzthiazole, II, 112.
- Spadolini, I., and Domini, G., dual action of acetylcholine on isolated heart, III, 841.
- Späth, E., and Biniecki, S., tobacco alkaloids. XVI. 1-Methylpyrrolidine, a new tobacco alkaloid; constitution of isonicotine, II, 111.
- and Hillel, R., natural coumarins. LI. Synthesis of xanthyletin, II, 139.
- and Schlager, J., constituents of red sandalwood. I. Constitution of homopterocarpin, II, 286.
- and Tyray, E., natural coumarins. L. Constitution of nodakenin from *Peucedanum decursivum*, Maxim, II, 139.
- Spain, A. W., agranulocytosis after small dose of sulphonamide, III, 862.
- Spain, B., calculation of nuclear energies and stability by the statistical method, I, 191.
- Spandau, H. See Jander, G.
- Sparks, F. W. See Henderson, G. H.
- Sparks, W. J. See Thomas, R. M.
- Spatz, S. M. See Gilman, H.
- Spaulding, E. H., and Bondi, A., jun., effectiveness of sulphanilamide on anaerobic hemolytic streptococci, III, 919.
- and Goode, W. G., anaerobic cultivations as routine bacteriologic procedure in clinical laboratory, III, 262.
- Speak, G. S. See Martin, L. C.
- Speakman, J. B. See Elliott, G. H.
- Speakman, J. C., thermodynamic dissociation constants of dibasic acids, I, 359.
- Spealman, C. R., action of osmotically-active substances on heart rate, III, 792.
- Spearman, M. P., and Vandevere, W. E., sulphapyridine in trachoma, III, 245.
- Specht, W. See Klauer, H.
- Specker, H. See Ley, H.
- Spedding, F. H., absorption of praseodymium ion in solutions and in the solid state, I, 381.
- Speekman, B. W., and Wibaut, J. P., determining the composition of mixtures by thermal analysis, I, 230.
- See also Wibaut, J. P.
- Speer, F. D. See Benson, R. A.
- Speer, J. H. See LeRoy, G. V.
- Speer, R. J., and Henze, H. R., 5-alkyl-5- α -sec-butoxyethylhydantoins, II, 141.
- Speert, H., placental transmission of sulphanilamide and its effects on foetus and newborn, III, 758.
- Spees, A. H., Colby, W. F., and Goudsmit, S., capture cross-section for thermal neutrons, I, 337.
- Speidel, C. C., histological changes in single fibres of striated muscle during contraction and clotting, III, 374.
- Speidel, H. See Grube, G.
- Speirs, M., utilisation of the calcium in various greens, III, 49.
- See also Ascham, L.
- Spek, J., p_H in living cells, III, 69.
- Spellberg, M. A., and Keeton, R. W., production of fatty livers in guinea-pigs with scorbutogenic diets, III, 40.
- Spence, A. W., testosterone propionate in mastitis, III, 33.
- See also Rowlands, I. W.
- Spence, J., optical anisotropy and structure of cellulosic sheet materials, I, 14. Optical anisotropy of cellulosic sheets, I, 289.
- Spence, R., accurate direct-reading manometer for corrosive and other gases, I, 177. Micro-analysis of gases, I, 420.
- Spence, R. W. See Copley, M. J.
- Spencer, E. See Percival, F. G.
- Spencer, E. L., and Lavin, G. I., frenching of tobacco, III, 366.
- See also McNew, G. L.
- Spencer, E. W. See Wheeler, D.
- Spencer, H. C. See Adams, E. M.
- Spencer, H. J. See Ward, J. C.
- Spencer, H. M., dissociation of iodine, I, 359.
- Spencer, L. J., tektites and silica-glass, I, 86.
- Spencer, T. W. See Manville, I. A.
- Spencer, W. V. See McBain, J. W.
- Spengeman, W. F. See Hall, N. F.
- Spenske, E. See Schottky, W.
- Sperber, E. See Runnström, J.
- Sperling, G. See Babcock, M. J., and McCay, C. M.
- Speroni, G., and Mannelli, G., organic selenium derivatives. V. Reaction products of selenium in [aqueous] sodium sulphide with benzyl derivatives, II, 248.
- and Simi, B., seleniated benzyl derivatives, II, 160.
- Sperry, R. B. See Dewey, B. T.
- Sperry, W. M., and Brand, F. C., absorption of water by liver slices from physiological saline solution, III, 220.

- Sperry, W. M., Waelsch, H., and Stoyanoff, V. A., lipid metabolism in brain and other tissues of the rat, III, 821. Synthesis and deposition of lipins in brain and other tissues with deuterium as indicator, III, 821. Lipid metabolism in brain during myelination, III, 822. See also Waelsch, H.
- Spessard, E. A., light-mass absorption during photosynthesis, III, 942.
- Spiegel, A., adenomata of the adrenal cortex in early castrated male guinea-pigs, III, 124.
- Spiegel, E., anticonvulsive effects of bromides, III, 441.
- and Spiegel-Adolf, M., mechanism of therapeutic effect of metrazol and insulin convulsions, III, 394.
- and Wycis, H., influence of hypochloramide on convulsive reactivity, III, 299.
- Spiegel, E. A., and Collins, D. A., ocular rotation in anaesthesia and under influence of supranuclear centres, III, 484.
- and Scala, N. P., rôle of cervical sympathetic nerve in light reflex of pupil, III, 489.
- See also Miller, H. R.
- Spiegel-Adolf, M., and Freed, H., effects of metrazol convulsions on cerebrospinal fluid, III, 24.
- and Peckham, R. H., photo-electric micro-densitometer, I, 272.
- See also Spiegel, E.
- Spiegelberg, H., simple synthesis of α -substituted crotonic acids, II, 373.
- Spiegelhoff, W. See Meyer, F.
- Spiegelman, A. R., influence of oestrogen on insulin requirement of the diabetic, III, 644.
- Spielhaczeck, H., determination of fluorine in cryolite by Greoff's method, I, 173.
- Spielman, M. A. See Docken, A. M.
- Levin, R. H., Mortenson, C. W., and Rothchild, I.
- Spier, E., Neuwelt, F., and Necheles, H., clinical study of diphenylacetyl-diethylaminoethanol (trasentin) as antispasmodic, III, 63.
- See also Bettman, R., and Meyer, J.
- Spier, W., transfusion of the patient's own blood in cases of ruptured Fallopian tube, III, 471.
- Spierer, C., internally reflecting ultra-microscope objectives and their application to biology and other sciences, I, 234.
- Spies, C. D. See Vilter, R. W.
- Spies, J. R., Coulson, E. J., Bernton, H. S., and Stevens, H., chemistry of allergens. II. Isolation and properties of an active protein component of cottonseed, III, 775.
- See also Bernton, H. S.
- Spies, T. D., ocular symptoms occurring from malnutrition in human beings, III, 233.
- Bean, W. B., and Vilter, R. W., adenylic acid in human nutrition, III, 673.
- Hightower, D. P., and Hubbard, L. H., vitamin therapy, III, 914.
- Vilter, R. W., and Ashe, W. F., pellagra, beri-beri, and riboflavin deficiency in human beings, III, 144.
- Walker, A. A., and Woods, A. W., pellagra in infancy and childhood, III, 233.
- See also Aring, C. D., Bean, W. B., Frostig, J. P., Himwich, H. E., Lewy, F. H., Stanberry, S. R., Vilter, R. W., and Vilter, S. P.
- Spiher, A. T. See Crowell, W. R.
- Spiliopulós, G., therapy of infantile leishmaniasis, III, 928.
- Spillane, J. D., and White, P. D., herpes zoster and angina pectoris, III, 15.
- Spiller, W. F., Sharp, W. B., and John, M. B., treatment of ringworm of the scalp with gentian-violet, III, 522.
- Spilling, G., relationship of ovarian masculinising tumours and hermaphroditism, III, 656.
- Spinapolic, M. E. See Piccoli, L. J.
- Spindler, F. See Upham, R.
- Spink, W. W., use of sulphanilamide in acute suppurative arthritis due to haemolytic streptococcus, III, 243.
- and Crago, F. H., sulphanilamide in subacute bacterial endocarditis, III, 60.
- Hurd, F. W., and Jermsta, J., *in vitro* conversion of prontosil-soluble into sulphanilamide by various types of micro-organisms, III, 519.
- See also Vigness, I., and Watson, C. J.
- Spiridonova, O. P. See Joschpa, I. E.
- Spirito, F., use of placental and mixed blood in blood transfusion, III, 471.
- Spitler, D. K. See Fetterman, J. L.
- Spitniková, A. See Bureš, E.
- Spitz, W. C. See Wishnosky, M.
- Spitzer, L., jun., spectra of M supergiant stars, I, 137. Impact broadening of spectral lines, I, 399.
- Spivak, G. V. See Rodin, M. I.
- Spizizen, J. See Ellis, E. L.
- Slatt, B. See Williams, Stanley.
- Spoerri, P. E. See Goldberg, S. D., and Hall, S. A.
- Spoerri, R., new material for mounting nerve tissue sections in paraffin for silver staining or restaining, III, 467.
- Sponer, H., near ultra-violet absorption spectrum of heavy benzene, I, 429.
- and Bonner, L. G., continuous absorption of nitrous oxide, I, 92.
- See also Bruch-Willstätter, M., Nordheim, G., and Sklar, A. L.
- Spoor, H. J. See Hartman, F. A.
- Sporling, G. See Bogart, R.
- Sprague, J. M., McBurney, L. F., and Kissinger, L. W., substituted sulphanilamides. II. N^2 - and N^4 -sulphonyl derivatives, II, 304.
- See also Miller, E.
- Sprague, R. G., influence of extract of adrenal cortex on glycogenesis in fasting rats, III, 807.
- Sprague, R. H. See Brooker, L. G. S.
- Spray, R. S., isolation of bacteria by surface-stroke plating, III, 262.
- Sprenger, O., reflex regulation of breathing, III, 17.
- See also Bakardjiew, W. N.
- Spriggs, E., medical treatment of peptic ulcer, III, 907.
- Spring, F. S. See Ewen, E. S., and Picard, C. W.
- Spring, W. C., jun., Lowell, F. C., and Finland, M., action of sulphapyridine on pneumococci, III, 245.
- See also Finland, M., and Taylor, F. H. L.
- Springer, C. See Tappi, G.
- Springer, V. F. See Hiskey, C. F.
- Springorn, P. W., increased water excretion due to sympathomimetic drugs, III, 922.
- Sprinson, D. B. See Baumann, E. J.
- Sprinz, H. See Moschkowitz, L.
- Sprules, F. J. See Adams, R.
- Sprung, M. M., mechanism of reaction between phthalic anhydride and an aminodiol, II, 88.
- Sprunt, D. H., part played by age and female sex hormones in resistance to infection, III, 211. Effect of varying volume of injection on calculating number of infectious particles of vaccine, III, 455.
- Hooker, C. W., and Raper, J. S., relation of spermatogenesis to factor in testis which increases tissue permeability, III, 132.
- Spruyt, J. P. See Gorter, F. J.
- Spurr, C. L., and Kochakian, C. D., effect of androgens on survival of adrenalectomised rats, III, 216.
- See also Murlin, J. R.
- Spurrell, W. R. See McKeown, T.
- Squire, P. A. See Dille, J. M.
- Squire, C. F., manganous compounds; antiferromagnetism; electrical conductivity as a function of temperature, I, 15. Magnetic cooling: production and measurement of temperatures below 1° K., I, 420.
- Sreenivasaya, M. See Sarma, P. S., Swamy, B. G. L., and Venkateswaran, S. L.
- Srikantia, C., Rao, C. K., and Row, T. P., glutathione in anaemias, III, 882.
- Rao, P. R. S., and Row, T. P., glutathione in ocular diseases, III, 573.
- Srinivasan, M. See David, J. C.
- Srinivasan, M. K., and Prasad, B., viscosity of aqueous solutions of formic, cyanoacetic, and oxalic acids, I, 66. Apparent molar volumes of strong electrolytes in aqueous solutions, I, 66.
- See also Singh, B. K.
- Srinivasan, P. S., ultra-violet irradiation of rubber, I, 7.
- Srivastava, B. N., thermal ionisation of barium, I, 241. Thermal transpiration of a dissociating gas, I, 390.
- Srivastava, L. M. See Qureshi, M.
- Stabler, R. M. See Nelson, O. E.
- Stacey, M., and Woolley, J. M., nature of the carbohydrate residue in ovomucoid. I. Glucosamine constituent, II, 120.
- See also Carrington, H. C., and Lyne, R. R.
- Stachowiak. See Schaefer, H.
- Stackelberg, M. von, and Freyhold, H. von, polarographic studies on complexes in aqueous solution, I, 324.
- Stadie, W. C., Lukens, F. D. W., and Zapp, J. A., jun., effect of insulin on uric acid formation, carbohydrate synthesis, and respiration of liver of normal and diabetic animals, III, 412. Effect of insulin on ketone metabolism of normal and diabetic cats, III, 412. Effect of insulin on oxidation of minced muscle tissue, III, 412.
- Stähler, F., effect of lactoflavin on the biology of the vagina, III, 593.
- Ställberg, S., surface films of heat-denatured serum-albumin, I, 70.
- and Teorell, T., method of spreading monolayers of albumin and lipin-albumin mixtures, I, 70.
- Staemmler, M., and Parade, G. W., carbon monoxide and essential hypertension [and hypertrophy of adrenal cortex], III, 101.
- Stäfel, M. G., gaseous exchange of lichens, III, 942.
- Stafford, R. W. See Rochow, T. G.
- Stage, H. H. See Gjullin, C. M.
- Stahel, E., and Guillissen, J., γ -radiation of internal reaction of radium-E, I, 140. Bremsstrahlung of radium-E, I, 185.

- Stalker, H., prognosis in schizophrenia, III, 299.
- Stamatescu, S., and Sturdza, N., relationship between R and S variants of *B. anthracis* and virulence, III, 540.
- Stamatin, L. See Levaditi, C., and Vieu-change, J.
- Stamatiu, M., plasticity of rock-salt, I, 63. Physical and mechanical properties of Roumanian rock salt, I, 182.
- Stamm, H., and Goehring, M., mechanism of formation of polythionic acids. II. Building-up of polythionic acids by means of thiosulphurous acid, I, 128.
- Stanbery, S. R., Snell, E. E., and Spies, T. D., assay method for pantothenic acid in human blood, III, 883.
- See also Mitchell, H. K.
- Stanciu, N. See Ionescu, C. N.
- Stanescu, M. See Baltaceanu, G.
- Stanescu, P. P., accumulation of carbohydrate in leaves kept in the dark, III, 270.
- Stanford, S. C., and Gordy, W., spectroscopic evidence for hydrogen bonds. Hexyl alcohols. I, I, 310.
- See also Gordy, W.
- Stanger, D. W. See Marberg, C. M.
- Stankevitch, E. I. See Petrov, A. D.
- Stanley, A. J., and Witschi, E., germ cell migration in relation to asymmetry in sex glands of hawks, III, 783.
- See also Melampy, R. M.
- Stanley, W. M., properties of viruses, III, 357. Architecture of viruses, III, 455. Purification of tomato bushy stunt virus by differential centrifugation, III, 938.
- See also Lauffer, M. A.
- Stannard, J. N., separation of resting and activity oxygen consumptions of frog muscle by means of sodium azide, III, 108. Analysis of effect of carbon monoxide on respiration of frog skeletal muscle, III, 796.
- Stannus, H. S., pellagra, III, 514.
- See also Galewski, S.
- Stantos, F. O., plane of nutrition of families of labourers in Calabanga, Camarines Sur, III, 142.
- Stanyon, J. H., typhoid fever treated with daganen, III, 245.
- Stare, F. J., and Baumann, C. A., effect of insulin on muscle respiration, III, 596.
- See also Baumann, C. A., and Feinstein, R. N.
- Stark, J., fine structure of the hydrogen lines, I, 87. Experimental refutation of the statistical view of the Bohr atomic model, I, 92.
- Starkenstein, E., heavy metals and hæmatopoiesis, III, 375.
- Starkey, E. B. See Dunker, M. F. W.
- Starkey, W. F., Grauer, R. C., and Saier, E., modifying influence of light on chicks' comb response to androsterone, III, 848.
- and Leatham, J. H., effects of menopause urine extract on sexual organs of female kittens, III, 126. Effect of mare serum hormone on male and female mouse, III, 403. Effect of normal male urine extract on immature female cats, III, 651. Action of oestrone on sexual organs of immature male cats, III, 652.
- See also Smith, R. D.
- Starling, W. W. See Petrov, V. A.
- Starosta, O. See Glazunov, A.
- Starr, I., rôle of the "static blood pressure" in abnormal increments of venous pressure, especially in heart failure. II. Clinical and experimental studies, III, 291.
- and Ferguson, L. K., methylcholine-urethane, III, 923.
- and Rawson, A. J., rôle of the "static blood pressure" in abnormal increments of venous pressure, especially in heart failure. I. Theoretical studies on an improved circulation schema whose pumps obey Starling's law of the heart, III, 291.
- Rawson, A. J., Schroeder, H. A., and Joseph, N. R., ballistocardiogram. I. Estimation of cardiac output in man, and of abnormalities in cardiac function, from the heart's recoil and blood's impacts, III, 99.
- and Schroeder, H. A., ballistocardiogram. II. Normal standards, abnormalities found in diseases of heart and circulation, and their significance, III, 563.
- Starring, E., poisoning from lead tetraethyl benzene and its combustion products, III, 258.
- Stasney, J., and Burns, E. L., influence of anti-anemic principles on size of erythrocytes of opossums in maternal pouch, III, 282.
- Feldman, W. H., and Popp, W. C., homologous transmission of lymphoblastic leukemia in calf, III, 91.
- See also Schenken, J. R.
- Stathis, (Mlle.) C. See Zenghelis, C.
- Stathis, E. C., and Egerton, A. C. G., heats of formation of ethyl and propyl peroxides, I, 217.
- Staub, A. M., synthetic bases antagonistic to histamine. II, III, 251.
- Staub, H., and Stephens, W. E., neutrons from boron plus deuterons, I, 306. α -Particles from disintegration of lithium by deuterons, I, 383.
- and Tatel, H., resonance scattering of neutrons in helium, I, 307.
- See also Bucher, K.
- Staudacher, E. V., nerve supply of lachrymal ducts, III, 4. Development of sympathetic chain in chicks, III, 552.
- Staudinger, H., and Schneiders, J., macromolecular compounds. CCXXXI. Polyvinyl chlorides, II, 33.
- and Sohn, A. W., macromolecular compounds. CCXXVII. Cellulose. LIII. Normal and faulty celluloses, II, 69.
- Stauff, J., equilibrium between molecular and colloidal substances in aqueous soap solutions. II. Temperature-dependence of the equilibrium and solubility curve of soaps, I, 70. Types of micelle in aqueous soap solutions, I, 112.
- Stauffer, R. E. See Jones, G.
- Stauss, H. E., electrical phenomena in a high-temperature laboratory furnace, I, 233.
- Staveley, H. E., preparation of Δ^5 -pregnenc-3:17-diol-20-one from Δ^5 -17-acetylenyl-androstene-3:17-diol, II, 180.
- See also Bergmann, W., and Fernholz, E.
- Stavers, E. See Medes, G.
- Stavraky, G. W., partition of nitrogen in submaxillary saliva evoked by chorda tympani stimulation in cat, III, 906.
- See also Komarov, S. A., and Miller, F. R.
- Stavrovskaja, V. I. See Drozdov, N. S.
- Stearie, E. W. R., quenching of mercury resonance radiation by ethylene, I, 183.
- Stearie, E. W. R., and Dewar, D. J., mercury-photosensitised reactions of propane, I, 417.
- and Folkins, H. O., kinetics of the thermal decomposition of the lower paraffins. V. Nitric oxide-inhibited decomposition of *n*-butane, I, 167.
- and Parlee, N. A. D., reaction of hydrogen and deuterium atoms with propane, I, 120.
- and Potvin, R., cadmium-photosensitised reactions of ethylene, I, 263.
- Stead, E. A., jun., and Knukel, P., influence of peripheral circulation in upper extremity on circulation time as measured by sodium cyanide method, III, 191. Nature of peripheral resistance in arterial hypertension, III, 192. Absorption of sulphanilamide as index of blood flow in intestine of man, III, 585.
- Kunkel, P., and Weiss, S., effect of pitressin on circulatory collapse induced by sodium nitrite, III, 103.
- See also Ebert, R. V., and Kunkel, P.
- Steadman, T. R., ring-enlargement of two cyclic α -chloro-ketones, II, 310.
- Stearn, A. E., redistribution reactions, I, 358.
- Johnston, H. P., and Clark, C. R., activation entropy in catalytic mechanisms, I, 32.
- Stearns, J. O. See Josephson, V.
- Stearns, M. L., development of connective tissue in transparent chambers in rabbit's ear. I. and II., III, 701, 876.
- Stebbins, D. W., effect of quartz filters on distribution of energy in Laue patterns, I, 150.
- Stebbins, J., Huffer, C. M., and Whitford, A. E., colours of 1332 B stars, I, 281.
- Steck, J. E., and Gellhorn, E., effect of carbon dioxide inhalation on peripheral blood flow in normal and sympathectomised patient, III, 293.
- Steckl, J. See Gault, H.
- Steckner, M. L. See Ratschow, M.
- Steel, G. C. See Schoenewald, G.
- Steel, W. D., other convulsions, III, 925.
- Steele, J. M. See Schroeder, H. A., and Sealock, R. R.
- Steele, W. I. See Schickltanz, S. T.
- Steenbock, H. See Johnson, L. M., and Schneider, H. A.
- Steenhauer, A. J. See Zwikker, J. J. L.
- Steer, A. See Benson, R. A.
- Steers, A. W., and Fischer, L., vitamins and constants of free and extracted oils from canned sockeye salmon, III, 672.
- Stefanelli, A., oxygen uptake of "organiser" of *Bufo vulgaris* and *Rana esculenta*, III, 87. Cerebellum of anamniotes, III, 110. Segmentation of eggs of *Rhabdites pellio*; nucleus-plasma ratio and synthesis of thymonucleic acid, III, 553. Micro-manipulation of nucleus of cells of salivary gland of *Chironomus plumosus*, III, 626. Abducens and accessory nuclei in reptiles, III, 889. Oculo-motor and trochlear nuclei in reptiles, especially chameleon, III, 889.
- Stefanesco, H. See Vladesco, R.
- Stefani, F., non-protein-nitrogen in renal blood, III, 96.
- Stefanovski, V. F., kinetics and mechanism of redox reactions. IV. Kinetics of reaction of oxidation of the stannous ion with chlorate, I, 222.
- Stefánsson, K. See Straub, W.
- Stefánsson, V., dilemma in vitamins, III, 53.

- Steffens, L. F., Bair, H. L., and Sheard, C., photometric measurements on visual adaptation in normal adults on diets deficient in vitamin-A, III, 892.
- Stefu, L. See Cracium, E. C.
- Stegagno, G., antagonism between cyclohexenylbarbiturates and pyrazolone drugs, III, 760.
- Stegeman, G. See Clarke, T. H.
- Steggerda, M., physical measurements on negro, Navajo, and white girls of college age, III, 784.
See also Carpenter, T. M.
- Stegmann, G. See Noack, K.
- Steidle, H., toxicology of thallium, III, 253.
- Steigman, A. J. See Farrar, G. E.
- Steigman, J. See Glasoe, G. N.
- Steigmann, F., and Dyniewicz, J. M., urinary elimination of free phenolphthalein no test for gastro-intestinal ulceration, III, 36.
and Fantus, B., acidity modification therapy in peptic ulcer, III, 740.
- Steiman, S. E., action of lead on phosphocreatine in muscular paralysis of lead poisoning, III, 107.
See also Hodes, R.
- Stein, C. D., Lucker, J. T., Osteen, O. L., and Gochenour, W. S., possible rôle of endoparasites in transmission of infectious anaemia, III, 690.
- Stein, G. A. See Stevens, J. R.
- Stein, H. B., volume of colloid in follicles of normal human (Bantu) thyroid gland, III, 621.
- Stein, I. See Sigler, L. H.
- Stein, J. L., and Steiner, M. M., meningitis caused by pneumococcus type III; sulphanilamide therapy, III, 676.
- Stein, L., disorders of articulate speech, III, 802.
See also Berens, C.
- Stein, Ludwig. See Zondek, B.
- Stein, W., optical properties of quartz at wave-lengths of 8–30 μ , I, 94.
- Stein, W. H., and Bergmann, M., determination of proline in mixtures containing l- and dl-proline; proline content of gelatin, II, 320.
See also Doherty, D. G.
- Steinach, E., and Kun, H., hyperaemia and male sex hormone, III, 647.
- Steinbach, H. B., electrolytes in *Thyone* muscles, III, 389. Sodium and potassium in frog muscle, III, 567. Chemical and concentration potentials in giant fibres of squid nerves, III, 714.
- Steinbach, M. See Solis-Cohen, L.
- Steinbach, M. M., and Dillon, B. M., sulphanilamide in experimental tuberculosis, III, 60.
and Duca, C. J., N¹-dodecylsulphanilamide, and sulphapyridine plus vitamin-C, in experimental tuberculosis in guinea-pigs, III, 757.
- Steinberg, C. L., untoward effects resulting from use of large doses of vitamin-B, III, 144.
and Suter, L. C., [serum-]phosphatase activity in chronic arthritis, III, 11.
- Steinberg, F. See Antropoff, A. von.
- Steinberg, I. See Robb, G. P.
- Steinberg, R. A., effects of nitrogen compounds and trace elements on growth of *Aspergillus niger*, III, 537. Relation of carbon nutrition to trace elements and accessory requirements of *A. niger*, III, 537. Action of organic compounds on yield, sporulation, and starch formation of *Aspergillus niger*, III, 867.
- Steinberg, R. A., and Bowling, J. D., optimum solutions as physiological reference standards in determining nitrogen utilisation by *Aspergillus niger*, III, 73.
and Thom, C., mutations and reversions in reproductivity of *Aspergilli* with nitrite, colchicine, and d-lysine, III, 933.
- Steinbocker, O., McEachern, G. C., LaMotta, E. P., and Brooks, F., cobra venom in arthralgias, III, 334.
- Steindl, H., enterospasm, III, 908.
- Steiner, A., and Turner, K. B., serum-cholesterol in acute infections as recorded during and after pneumonia, III, 472.
See also Victor, J.
- Steiner, G., staining spirochaetes in routine paraffin sections, III, 181.
- Steiner, H., exchange reactions between deuterium and hydrogen halides. II. Hydrogen bromide, I, 165. Exchange reaction between hydrogen and hydrogen iodide, I, 442.
and Rideal, E. K., exchange reactions between deuterium and hydrogen halides. I. Hydrogen chloride, I, 165.
- Steiner, M. M. See Kramer, B., and Stein, J. L.
- Steiner, N. See Necheles, H.
- Steinert, B., respiration in yeast, III, 261.
- Steingiser, S. See Waring, C. E.
- Steinhansen, T. B. See Murlin, J. R.
- Steinhausen, W., physiology of labyrinth and new model of semicircular canals, III, 27.
- Steininger, G., and Roberts, L. J., biophotometer test for vitamin-A deficiency, III, 300.
Roberts, L. J., and Brenner, S., blood-vitamin-A in normal adults, III, 320.
- Steinitz, E. See Zelson, C.
- Steinitz, F. S. See Katz, L. N.
- Steinitz, H., fructosuria, III, 419.
- Steinitz, K., determination of urea in blood and urine by Conway units, III, 275. Conditions of glucose excretion [by kidney] in man, III, 503. Renal excretion of sucrose in normal man; comparison with inulin, III, 852.
and Rurkand, H., determination of glomerular filtration by endogenous creatinine clearance, III, 502.
- Steinkamm, E., action of follicle hormone in incontinence of urine, III, 30.
- Steinke, E. G., and Schmid, Hermann, Hoffmann collisions and multiplication theory, I, 336.
- Steinkopf, W., and Hanske, W., thiophen series. XLIX. Constitution of indophenines, II, 51.
- Leitsmann, R., Müller, A. Herbert and Wilhelm, H., thiophen series. L. Derivatives of 3:4-dibromothiophen-2:5-dialdehyde and macrocyclic compounds, II, 52.
and Petersdorff, H. J. von, thiophen series. LI. Atophan-like derivatives of di-thienyl and diphenyl, LII. Derivatives of 3-bromo- and 2:3-dibromothiophen, II, 232.
- Steinman, H. G. See Doak, G. O.
- Steinmann, B., circulating blood volume in cardiac disease, III, 9. Functional cardiac tests for military service, III, 563.
See also Wilbrandt, W.
- Steinmaurer, H., action of prontosil in meningitis, III, 243.
- Stekol, J. A., phenanthrene in relation to growth of rats maintained on a low-casoin diet, III, 231. Conversion of S-benzylglutathione into benzylmercapturic acid in the rat, III, 517.
- Stellar, L. I., and Olken, H. G., thyroglobulin in blood, III, 894.
- Stelling, O., chemical constitution and K[α -level] X-ray absorption spectra. XV. Preliminary work with a high-intensity spectrograph using a concave bent crystal, I, 424.
and Wallén, K. A., chemical constitution and K[α -level] X-ray absorption spectra. XVI. Chromium compounds, I, 424.
- Stelzer, S., determination of prontosil-soluble in blood and plasma, III, 519.
- Stene, J. See Kuhn, R., and Sørensen, N. A.
- Stengel, A. See Ravdin, T. S.
- Stenhagen, E., monolayers of compounds with branched hydrocarbon chains. I. Di-substituted acetic acids, I, 209. Monolayers of a long-chain ester sulphate, I, 209.
- Stenhouse, E. See Muir, K. B.
- Stenstrom, K. W., Hallock, P., and Watson, C. J., negative results of irradiation therapy of pylorus and Brunner's gland area in patients with polycythemia vera, III, 556.
- Stenstrom, W., and Vigness, I., elimination of radioactive elements in patients who have received thorotrast intravenously, III, 749.
- Steopoe, A., oxidation of ammonium oxalate before precipitation of magnesium, I, 445.
- Stepanov, B. I. See Nikolaev, V. I.
- Stepanov, S. I. See Jurashevski, V. K.
- Stepantzeva, T. G. See Pokrovskaja, E. S.
- Stephan, H. See Dilthey, W.
- Stephan, H. W. See Brand, K.
- Stephen, G. M. See Macdonald, A.
- Stephen-Lewis, F. V., composition of tuber of *Raphionacmedivariata*, Harv., III, 694.
- Stephens, D. J., suppression of lactation in acromegaly during oestrogenic therapy, III, 121. Effect of thyrotropic principle of pituitary on thyroid of undernourished guinea-pig, III, 404. Chloride excretion in hypopituitarism with reference to adrenocortical function, III, 409. Chloride excretion in hypothyroidism, III, 726. Zinc salts and oil in prolongation of therapeutic effect of pitressin in experimental diabetes insipidus, III, 732.
- Stephens, W. E., effect of the Coulomb force on binding energies of light nuclei, I, 309.
See also Haxby, R. O., and Staub, H.
- Stephenson, C. S. See Peller, S.
- Stephenson, D., and Ross, H. E., chemotherapy of anaerobic infections, III, 521.
- Stephenson, M., formic hydrogenlyase, III, 346.
- Stephenson, O., and Waters, W. A., decomposition reactions of aromatic diazo-compounds. VIII. The diazocyanides, II, 11.
- Stepp, W., treatment of tachycardia, III, 189.
- Sterling, A. See Newell, J. M.
- Sterling, K., and Miller, J. G., effect of hypnosis on visual and auditory acuity, III, 575.
- Stern, Adolf, and Pruckner, F., light absorption of some derivatives of bacteriochlorophyll, I, 145.

- Stern, *Adolph*, and Beach, *E. F.*, micro-determination of homocystine in pure solution with the dropping mercury cathode, III, 550.
- Beach, *E. F.*, and Macy, *I. G.*, polarographic micro-determination of cystine in protein hydrolysates, III, 176.
- Stern, *A. W.*, nuclear electron showers, I, 188.
- Stern, *B.* See Kaplan, *I.*
- Stern, *E. A.* See Ivanov, *L. A.*
- Stern, *K.* See Goldstein, *H.*
- Stern, *K. G.*, moving boundary method for studying electrophoresis, I, 72.
- and Duran-Reynals, *F.*, physico-chemical properties of Rous chicken tumour agent, III, 46.
- and Kirschbaum, *A.*, nature of agent causing leucosis in fowls, III, 46.
- and Melnick, *J. L.*, mechanism of cocarboxylase action, III, 161, 931.
- Melnick, *J. L.*, and DuBois, *D.*, nature of the Pasteur enzyme, III, 764.
- See also Melnick, *J. L.*, and Shipley, *R. A.*
- Stern, *O.* See Estermann, *I.*
- Stern, *R.* See Zeller, *E. A.*
- Stern, *S.*, and Taub, *A.*, chemotherapy of azobenzenculphonicchloramide series. II. *m*- and *p*-Derivatives, II, 126.
- Stern, *V.*, and Polak, *S.*, polarographic analysis of mixtures of aldehydes and peroxides, I, 220.
- Sternbach, *L.* See Ruzicka, *L.*
- Sternberg, *T. H.* See Stokes, *J. H.*
- Sternberg, *W. H.* See Gross, *H.*
- Sternberg-Raab, *A.*, double vision after squint operation, III, 114.
- Sternfeld, *E.* See Kharasch, *M. S.*
- Sternheimer, *R.*, effect of single injection of thyroxine on carbohydrates, protein, and growth in rat liver, III, 208.
- Stetkewicz, *J. D.* See Hixson, *A. W.*
- Stetson, *R. P.* See Gessler, *C. J.*
- Stetten, *De W., jun.*, and Schoenheimer, *R.*, conversion of palmitic acid into stearic and palmitoleic acids in rats, III, 517. Biological relations of higher aliphatic alcohols to fatty acids, III, 517.
- Stetter, *G.*, and Wambacher, *H.*, multiple transmutation of atomic nuclei by cosmic rays, I, 142.
- Steubing, *W.*, and Keil, *A.*, fine structure of the Stark effect in the H_g line, I, 305.
- Stevens, *J. M.*, calculation of the b.p. of simple compounds, I, 105.
- See also Haresnape, *J. N.*
- Steven, *A. B.* See Boyle, *J. L.*
- Stevens, *B.* See Wangenstein, *O. H.*
- Stevens, *C. M.* See Carter, *H. E.*
- Stevens, *D. S.* See Dick, *G. F.*
- Stevens, *H.* See Bernton, *H. S.*, Phillips, *M.*, and Spies, *J. R.*
- Stevens, *J. R.*, and Stein, *G. A.*, vitamin-B₁. XIX. Derivatives of γ -acetopropyl alcohol, II, 285.
- See also Smith, *L. I.*
- Stevens, *N. P.* See Beebe, *R. A.*
- Stevens, *P. G.*, acid iodides. IV. Mechanism of ether cleavage, II, 296.
- Allenby, *O. C. W.*, and DuBois, *A. S.*, reduction of α -bromo-ketones by aluminium isopropoxide; isomeric aminoalcohols of the ephedrine series, II, 306.
- Stevens, *R. E.*, extraction of alkalis in rocks; modification of the J. Lawrence Smith extraction, using barium chloride as a flux, I, 371.
- Stevens, *R. E.*, Segal, *H. L.*, and Scott, *W. J. M.*, effect on gastric secretion of introducing dilute hydrochloric acid into duodenum in normal and duodenal ulcer patients, III, 309.
- Stevens, *R. G.* See Lamb, *A. B.*
- Stevens, *R. J.*, Schiff, *L.*, Lublin, *A.*, and Garber, *E. S.*, renal function and azotemia following hematemeses, III, 221.
- See also Schiff, *L.*
- Stevens, *T. O.* See Ehrenstein, *M.*
- Stevens, *T. S.* See Cowper, *R. M.*
- Stevenson, *D. P.*, structure of phosphino and related hydrides, I, 198.
- and Cooley, *R. A.*, structure of thionyl bromide, I, 433.
- and Russell, *H., jun.*, molecular structures of sulphuryl fluoride and thiophosphoryl fluoride, I, 101.
- and Schomaker, *V.*, electron diffraction investigation of molecular structures of the *meso* and racemic β -dibromobutanes, I, 13. Electron diffraction investigation of molecular structure of tellurium tetrachloride, I, 312. Molecular structures of dimethylchloramine and methyldichloroamine, I, 404. Stable relative orientation of groups connected by a carbon-carbon single linking, I, 404.
- See also Schomaker, *V.*
- Stevenson, *E. S.*, and White, *A.*, influence of iodoacetic acid on sulphur metabolism; growth studies in the young rat, III, 755.
- Stevenson, *G. H.*, psychological and medical aspects of excessive use of alcohol, III, 602.
- Stevenson, *M. M.* See Morris, *N.*
- Stewart, *F. C.*, and Preston, *G.*, metabolic processes of potato discs under conditions conducive to salt accumulation, III, 941.
- See also Hoagland, *D. R.*
- Stewart, *A. H.* See Talbot, *N. B.*
- Stewart, *A. H.* See Talbot, *N. B.*
- Stewart, *C. A.* See Tortone, *J.*
- Stewart, *C. F.*, renal arteriosclerosis with hypertension, III, 793.
- Stewart, *D.*, and Lewinsky, *W.*, comparative study of innervation of the gum, III, 374.
- See also Lewinsky, *W.*
- Stewart, *Donald*, effect of complete removal of muscles on gait of rabbit, III, 1.
- Stewart, *D. W.* See Bulmer, *F. M. R.*, and Hutchison, *C. A.*
- Stewart, *G. S.* See Neufeld, *A. H.*
- Stewart, *G. W.*, variation in the structure of water in ionic solutions, I, 25.
- Holland, *D. O.*, and Reynolds, *L. M.*, orientation of liquid crystals by heat conduction, I, 387.
- Stewart, *H. J.*, and Bailey, *R. L., jun.*, effect of posture on precordial leads of electrocardiogram, III, 290. Effect of unilateral spontaneous pneumothorax on circulation in man, III, 479.
- Crane, *N. F.*, Watson, *R. F.*, Wheeler, *C. H.*, and Feitrick, *J. E.*, cardiac output in congestive heart failure and in organic heart disease, III, 793.
- Smith, *J. J.*, and Milhorat, *A. T.*, electrocardiographic and serum-potassium changes in familial periodic paralysis, III, 713.
- and Watson, *R. F.*, circulation in athletes, III, 189.
- Stewart, *H. L.*, induction of gastric tumours in strain A mice by methylcholanthrene, III, 422. Histological changes and transplantation of tissue surrounding methylcholanthrene pellets during latent period of tumour development in female C₃H mice, III, 422.
- See also Grady, *H. G.*
- Stewart, *H. S., jun.*, and O'Brien, *B.*, automatic spectrograph and accessory equipment for solar spectrum photography, I, 394.
- See also O'Brien, *B.*
- Stewart, *J.* See Gordon, *W. S.*
- Stewart, *J. D.*, prothrombin deficiency and effects of vitamin-K in obstructive jaundice and biliary fistula, III, 185.
- and Rourke, *G. M.*, prothrombin deficiency in obstructive jaundice, III, 284. Inactivation of thrombin by plasma-protein, III, 880.
- Stewart, *J. K.* See Pohle, *F. J.*
- Stewart, *O. W.* See Saucier, *J.*
- Stewart, *S. E.*, toxins and antitoxins of *Cl. perfringens*, III, 769.
- Stewart, *T. D.*, life and writings of Dr. Al \acute{e} s Hrdlička (1869—1939), III, 554.
- See also Lipkin, *D.*
- Stewart, *W.*, apparatus for removal of deleterious bacteria from protozoan cultures, III, 74.
- Stewart, *W. B.* See Hughes, *J.*
- Stewart, *W. H.*, Huber, *F.*, and Ghiselin, *F. H.*, improved routine for Roentgen examination of rectum and sigmoid, III, 742.
- Stewart, *W. T.* See Anderson, *Ernest*, and Lucas, *H. J.*
- Stewart-Wallace, *A. M.*, biochemical study of cerebral tissue, and of changes in cerebral oedema, III, 636.
- Stickney, *J. C.*, effect of adrenaline on potassium balance in perfused hind limbs of frog, III, 729.
- Stiehler, *R. D.*, and Gresham, *T. L.*, redistribution reaction, II, 338.
- Stier, *E.* See Fischer, *Hans*.
- Stier, *T. J. B.*, and Taylor, *H. E.*, seasonal variation in behaviour of intact frog heart at high temperatures, III, 189.
- Stierlen, *G.*, addition of synthetic colloid to hypertonic solutions and blood substitutes, III, 9.
- Stiff, *J. F.* See Gamble, *E. L.*
- Stiles, *H. R.*, and Pruess, *L. M.*, nutrient requirements of *Lactobacillus delbrückii* in the lactic acid fermentation of molasses, III, 934.
- Stiles, *M. H.* See Chapman, *G. H.*
- Stiles, *W.*, and Skelding, *A. D.*, salt relations of plant tissues. I. Absorption of potassium salts by storage tissue, III, 939.
- Still, *J. L.*, alcohol enzyme [dehydrogenase] of *Bacterium coli*, III, 930.
- Stille, *B.*, significance of the rhizosphere, III, 457.
- Stiller, *E. T.*, Harris, *S. A.*, Finkelstein, *J.*, Keresztesy, *J. C.*, and Folkers, *K.*, pantothenic acid. VIII. Total synthesis of pure pantothenic acid, II, 299.
- Keresztesy, *J. C.*, and Finkelstein, *J.*, pantothenic acid. VI. Isolation and structure of the lactone moiety, II, 299.
- Stillerman, *M.* See Thalheimer, *W.*
- Stillman, *N.* See Perlman, *I.*
- Stillson, *G. H.* See Clark, *R. O.*
- Stillwell, *F. L.*, and Edwards, *A. B.*, lollingite, and the occurrence of cobalt and nickel in the Broken Hill lode, I, 47.

- Stilwell, E. F., multipolar mitoses in embryonic chick cells grown *in vitro*, III, 701.
- Stimson, (Miss) M. M. See Loofbourow, J. R.
- Stimson, R. L. See Irvine, R.
- Stine, D. G., testing cardiac function, III, 384.
- Stingel-Munzert, H. See Dirr, K.
- Stirling, J. W. See Lyon, R. A.
- Stirling, W. C., sulphathiazole in septicæmia, III, 920.
- Stitt, F., heat capacity of cyanogen gas, I, 64. Infra-red and Raman spectra of polyatomic molecules. X. C_2D_2 , C_2D_4 , and C_2H_2 , I, 95.
- Stix, L. See St. George, A. V.
- Stock, A., action and distribution of mercury. XXIX. Surface phenomena and micro-analytical determination of mercury, I, 131.
- Stock, C. C., and Francis, T., inactivation of virus of epidemic influenza by soaps, III, 937.
- Stockbarger, D. C., temperature gradient control in crystallisation from the melt, I, 329.
- Stockburn, A., solubility of lead in tin, I, 318.
- Stockdale, D., densities of the silver-rich zinc-silver alloys: calculation of densities from lattice parameters, I, 437.
- Stocken, L. A. See Ochoa, S.
- Stocker, F. See Meili, C.
- Stockholm, M. See Althausen, T. L., and Eiler, J. J.
- Stoekmann, L. L. See Curtiss, L. F.
- Stockton, A. B. See Tainter, M. L.
- Stoddart, E. M., kinetics of the inhibition of the reaction between chlorine and nitric oxide, I, 390.
- Stodtmeister, R., and Buechmann, P., serum-iron in leukemia, III, 473.
- Stöger, R., relations between vitamin-B₁ and -C, III, 232.
- Stoesser, A. V., altered lipin metabolism in acute infections of infants and of older children, III, 57. Influence of sulphapyridine therapy on plasma-lipins in pneumonia, III, 598. Influence of specific serum therapy on plasma-lipins in pneumonia, III, 598.
- Stötter, G., carbohydrate tolerance tests in normal and pathological conditions, III, 433.
- and Schütte, E., course of diabetes mellitus, III, 239.
- Stoiber, R. E., minor elements in sphalerite, I, 398.
- Stokes, A. B., somatic research in periodic catatonia, III, 721.
- See also Guttman, E.
- Stokes, F. R. See Metzger, H. J.
- Stokes, H. L., and Brown, C. J. O., agenesis of lung, III, 886.
- Stokes, J. H., Beerman, H., and Ingraham, N. R., jun., psychoneurogenous component of cutaneous reaction mechanisms, III, 198.
- and Sternberg, T. H., factor analysis of acne complex with therapeutic comment, III, 67.
- Stokes, M., thyroid treatment and the cyclostome endostyle, III, 407.
- Stokes, R. H. See Robinson, R. A.
- Stokstad, E. L. R., Manning, P. D. V., and Rogers, R. E., relationship between factor U and vitamin-B₆, III, 323.
- See also Almquist, H. J.
- Stoll, G., composition of fluid from ovarian cysts, III, 650.
- and Provenzale, L., effect of traumatic shock on residual nitrogen fractions of blood, III, 381.
- See also De Ritis, F.
- Stolkind, E., congenital abnormalities of gall bladder and extra-hepatic ducts, III, 2.
- Stoll, A., variations in glucoside content of different specimen of digitalis, III, 923.
- and Renz, J., scilliroside, II, 206. Cardiac glucosides. XVI. Enzymes, especially those of *Strophanthus* seeds, that hydrolyse cardiac glucosides, III, 347.
- Stoll, M., and Scherrer, W., substances with odour of violets. VIII. Synthesis of 1:1:6-trimethyl-3- γ -keto- Δ^4 -butenylcycloheptene, II, 347.
- Stoll, R., experimental conditions permitting rotation of orientation in unactivated egg of *Rana fusca*, III, 86.
- Stoll, W., depot action of "nativinsulin," III, 305.
- Stolleis, D., glycogen storage disease, III, 239.
- Stolper, L. See Hertziken, S. D.
- Stolte, L. A. M. See De Jongh, S. E.
- Stone, A. M., and Lamar, E. S., positive column of the nitrogen arc at atmospheric pressure. II, 1, 137.
- Stone, C. P., precocious copulatory activity induced in male rats by subcutaneous injections of testosterone propionate, III, 645.
- and Barker, R. G., change of age of puberty in rats by selective mating, III, 737.
- Stone, G. C. H., activity coefficient of thallous iodate in solutions if alkane-disulphonates, I, 214. Synthesis of sodium tetradecanedisulphonate, II, 151.
- Stone, H. W., and Hume, D. N., reduction by amalgamated zinc; significant factors in efficiency, I, 82.
- Stone, I., stable 2:6-dichlorobenzenone-indophenol solutions, I, 393.
- Stone, K. L., and Pool, M. L., fundus photography without cycloplegics, III, 301.
- Stone, L. S., reimplantation and transplantation of eyes in anuran larvae and *Fundulus heteroclitus*, III, 802.
- Stone, M. H., general theory of spectra. I, 1, 342.
- Stone, S., vitamin-E and muscular dystrophies, III, 797.
- Stone, T. T., and Arief, A. J., remissions in epileptic patients treated with sodium bromide, III, 720.
- Stone, W. E., instrument for the reproduction, regulation, and control of variable temperature, I, 39. Acid-soluble phosphorus compounds and lactic acid in brain, III, 800.
- See also McQuarrie, I.
- Stoneburg, C. A., and Haven, F. L., tumour inhibition by anti-tumour nuclei serum, III, 508.
- Stonestreet, G. O., and Wright, G. F., microchemical technique. IV. Micro-determination of mercury and halogen in organomercuric halides, II, 386.
- Stong, J. P., jun. See Kobe, K. A.
- Stora, (Mlle.) C., polymorphism of choline ester iodides, I, 151.
- and Freymann, R., molecular associations of cholesterol from absorption spectra in the near infra-red, I, 56.
- See also Mathieu, M.
- Storch, T. J. C. von, production and localisation of headache with subarachnoid and ventricular air, III, 718.
- and Bnermann, A., subdural shadows in pneumo-encephalograms: their diagnosis, origin, and significance, III, 300.
- Storks, K. H. See Germer, L. H.
- Storm, L. F. M. See Gellhorn, E.
- Stormont, R. T., Foster, M. A., and Pfeiffer, C., plasma-pH, blood-CO₂, and "tissue gas" tensions during hibernation, III, 105.
- Seevers, M. H., Shideman, F. E., and Becker, T. J., respiratory alkalosis during anaesthesia. III. Haemoglobinæmia following prolonged hyperventilation, III, 680.
- See also Seevers, M. H.
- Storti, F. N. See Hemmeler, A.
- Storto, T. See Manzoni-Ansidei, R.
- Storvick, C. A. See Belser, W. B.
- Story, E. V. See Kehoe, R. A.
- Story, L. F. See Falconer, R.
- Storz, H., essential hypertension [relation to pituitary insufficiency], III, 633.
- Stott, V. H., laboratory gas furnace for very high temperatures, I, 175.
- Stotz, E., determination and distribution of cytochrome oxidase and cytochrome c in rat tissues, III, 161.
- Stoughton, R. W., and Rollefson, G. K., quenching of fluorescence in solution. II. Temperature and solvent effects, I, 436.
- Stout, A. P. See Engle, E. T., and Murray, M. R.
- Stout, P. R., and Arnon, D. I., rôle of copper, manganese, and zinc in nutrition of higher plants, III, 173.
- and Hoagland, D. R., upward and lateral movement of salt in certain plants as indicated by radioactive isotopes of potassium, sodium, and phosphorus absorbed by roots, III, 457.
- See also Arnon, D. I.
- Stovall, W. D., and Black, C. E., influence of pH on eosin-methylene-blue method for demonstrating Negri bodies, III, 556.
- See also Almon, L.
- Stowe, W. J. I. See Ramage, G. R.
- Stoyanoff, V. A. See Sperry, W. M.
- Straaten, T., and Hünermann, M., regulation of blood-sugar after stomach operations, III, 883.
- Strachan, A. S. See Simson, F. W.
- Strain, C. V. See DuBridge, L. A.
- Strain, H. H., extraction of proteins and proteolytic enzymes from yeast, III, 164.
- and Linderstrøm-Lang, K., aëration of papain digests of wool; production of compounds insoluble in trichloroacetic acid, III, 164.
- Strait, L. A., and Aird, R. B., detection of cocaine hydrochloride in cerebrospinal fluid by spectroscopic analysis, III, 863.
- Straitiff, W. G. See Kemp, A. R.
- Stranathan, J. D. See Good, W. M.
- Straneo, (Signa.) C., phenolic behaviour of buchu-camphor and its derivatives, II, 136.
- Stranski, I. N., theory of crystal growth and the possibility of determining the forces acting between the lattice components in homopolar crystals by means of crystal growth shapes, I, 150.
- Strassburger, H. See Hettche, H. O.
- Strassmann, F. See Hahn, O.

- Straub, F. B., crystalline lactic dehydrogenase from heart muscle, III, 531.
- Straub, W., and Amann, A., nicotine and effects of smoking, III, 600.
- Kanda, Z., and Zinnitz, F., relation between frog titre and guinea-pig titre in evaluation of digitalis, III, 523.
- and Stefánsson, K., action of ferrous iron [antagonism to adrenaline], III, 643.
- Strauch, F. W., hypophysis and diabetes mellitus, III, 302.
- Strauch, W. See Riess, O.
- Straumanis, M., accuracy of lattice constant determination with particular reference to the asymmetric method, I, 348.
- and Brakås, N., hydrogen overvoltage on cadmium, with access of air, I, 75.
- Straus, F., corpus luteum in *Centetida*, III, 650.
- Straus, W. L., and Weddell, G., nature of first visible contractions of forelimb musculature in rat foetuses, III, 798.
- Strauss, A., and Werner, H., finger agnosia in children, III, 22.
- Strauss, H., Rahm, W. E., jun., and Barrera, S. E., electro-encephalographic studies in relatives of epileptics, III, 112.
- Strauss, L. H., hypertrophy of the diaphragm following exercise, III, 19.
- and Bolt, F., prognosis in typical and atypical bundle branch block, III, 190.
- and Föckeler, J., action of tobacco on teeth, III, 605.
- Strauss, M. B., and Pohle, F. J., remission in pernicious anemia, III, 557.
- Strauss, S. F. See Kroll, H.
- Straan, L. P., skin test for susceptibility to pertussis, III, 688.
- Strebeiko, P. von, effect of phosphorus on the nitrogen and sulphur intake of oats, III, 940.
- Streck, E., preparation of phosphors, I, 264.
- Street, H. R., and Reeves, R. E., occurrence of riboflavin in tubercle bacillus, III, 936.
- Street, J. A., determination and detection of small quantities of phosphorus by the quinoline molybdate complex, I, 38.
- See also Gay, F. P.
- Street, S. F. See Ramsey, R. W.
- Streeter, S. F., and Mayer, J. E., statistical mechanics of condensing systems. VI. Treatment of a system of constant energy, I, 17.
- See also Mayer, J. E.
- Streiff, E. B. See De Montmollin, R.
- Streitwieser, R. J. See Kiene, H. E.
- Strelitz, F. See Mendel, B.
- Strell, M. See Fischer, Hans.
- Strelzova, A. A. See Voroshnev, N. N.
- Streng, K. O., diminution of activity of BCG bacillus after subculturing on a bile medium, III, 613.
- Carbohydrates in filtrates of *B. tuberculosis* cultures, III, 613.
- Strepkov, S. M., labiose, a new trisaccharide of the type of trehalose, II, 7.
- Microiodometric determination of nitrogen, II, 31.
- Natural depolymerisation products of inulin, II, 156.
- Streukens, T. See Tortone, J.
- Strickland-Constable, R. F., oxidation of carbon by nitrous oxide, I, 77.
- Strickler, H. S. See Wilson, D. A.
- Strickroot, F. L. See Schaefer, R. L.
- String, W. C., jun. See Lowell, F. C.
- Stringer, L. D. See Hunter, F. R.
- Stringham, B., occurrence of feldspar replacing fossils, I, 238.
- Strock, L. W., fundamental features of the photographic process and their special manifestation in quantitative spectrochemical methods, I, 330.
- Stroebe, F., and Thaddea, S., serum-lipins in adrenal cortex insufficiency, III, 306.
- Ströbel, H., action of prontosil in erysipelas, III, 242.
- Ströer, W. F. H., optical system of newt (*Triturus taeniatus*), III, 640.
- See also De Buriel, H. M.
- Ström, J., prontosil rubrum in treatment of scarlet fever, III, 921.
- Strobbusch, E., monochromator for spectrophotometric investigations, I, 271.
- Strohl, A., limits of validity of laws of physiological electrotonus [in nerve], III, 198.
- Strong, F. M. See Snell, E. E.
- Strong, G. F., and Munroe, D. S., cardiac hypertrophy; 42 hearts weighing 750 grams or more, III, 711.
- Strong, J., monochromators and auxiliary apparatus, I, 40.
- Radiation pyrometer for the measurement of low and high temperatures, I, 304.
- and Watanabe, Kenichi, pressure effect on infra-red absorption, I, 310.
- Strong, K. C., plastic studies in abnormal renal architecture; parenchymal alterations in experimental hydronephrosis, III, 418.
- Strong, L. C., problems of tissue specificity and chemotherapy of cancer, III, 508.
- Chemical studies on nature of susceptibility to spontaneous carcinoma of mammary gland in mice, III, 670.
- Effect of heptaldehyde sodium bisulphite on spontaneous mammary cancer in mice, III, 747.
- Genetic analysis of induction of tumours by methylcholanthrene; origin of the *NH* strain of mice, III, 853.
- and Francis, L. D., differences in haemoglobin values in blood of breeder female mice; comparison between cancer-susceptible and cancer-resistant strains, III, 506.
- and Smith, G. M., local induction of carcinoma of the mammary gland by methylcholanthrene, III, 140.
- See also Bergmann, W., Gardner, W. U., and Kirschbaum, A.
- Strong, M. T. See Hill, R. T.
- Strong, R. A., and Marks, H. P., icterus gravis neonatorum, III, 220.
- Strongin, E. I., and Hinsie, L. E., differentiating manic-depressive depressions from other depressions by means of parotid secretions, III, 201.
- Strothers, J. E. See Curran, S. C.
- Strotzer, E. F., and Biltz, W. [with Meisel, K.], zirconium sulphides, I, 35.
- Schneider, O., and Biltz, W., affinity. XCIII. Uranium sulphides, I, 266.
- Stroud, S. W., metabolism of stilbene, III, 151.
- Recovery of injected oestrogenic substances from rabbit urine, III, 653.
- Evidence of demethylation in animal body, III, 918.
- Strouse, S. See Martin, H.
- Struck, H. C., and Platner, E. B., pharmacological properties of saturated fluorocarbons, III, 444.
- Struett, H. See Turner, C. D.
- Strughold, H., physiological effects of high-altitude flying, III, 195.
- Strumia, M. M., Wagner, J. A., and Monaghan, J. F., citrated plasma in secondary shock, III, 558.
- Strumza, M. V. See Binet, L.
- Struppler, V., nerve-supply of larynx by accessory nerve, III, 104.
- Struthers, R. R., and Bacal, H. L., *in vitro* experiments on effect of addition of serum and plasma on sedimentation rate, III, 469.
- Strutt, M. J. O., and Knol, K. S., resistance measurements on iron wires in the frequency range 10^7 to 3×10^8 Hz, I, 152.
- Struve, O., ultra-violet spectra of A and B stars, I, 137.
- and Roach, F. E., ultra-violet spectra of 17 Leporis and P Cygni, I, 137.
- See also Swings, P.
- Struve, W. S. See Bachmann, W. E.
- Stryker, W. A., renal lesion from sulphapyridine, III, 599.
- Stuart, A. See Griffiths, J. C.
- Stuart, A. H., and Mosettig, E., phenanthrene series. XXIV. Phenolic aminoalcohols and naphthisoquinolines derived from 9:10-dihydrophenanthrene, II, 288.
- Stuart, A. P. See Farinholz, L. H.
- Stuart, C. A., Griffin, A. M., and Baker, M. E., relationships of coliform organisms, III, 934.
- Mickle, F. L., and Borman, E. K., grouping of slow lactose-fermenting coliform organisms, III, 611.
- Wheeler, K. M., and Griffin, A. M., coliform organisms in certified milk, III, 935.
- Stuart, G. See Sheldon, J.
- Stuart, H. A. See Kast, W., and Peterlin, A.
- Stubbe, H., effects of nutrition on the initiation of hereditary changes, III, 80.
- Stubblefield, F. M., and DeTurk, E. E., effect of ferric sulphate in shortening Kjeldahl digestion, I, 370.
- Stubbs, A. L. See Morton, R. A.
- Stuckey, R. E. See Linnell, W. H.
- Studer, A., Fleisch, A., and Croisier, M., vasodilator substance in red blood cells, III, 477.
- Studnitz, G. von, cone and pigment epithelium oil droplets and regeneration of cone substance and visual purple, III, 490.
- Studt, E. See Klein, W.
- Stüber, C. See Kohlhaas, R.
- Stueckelberg, E. C. G., invariant perturbation theory of the electron-neutrino particle under the influence of electromagnetic and nuclear fields (field theory of matter). II, I, 5.
- Stücklen, (Miss) H., Thayer, (Miss) H., and Willis, (Miss) P., spectrographic study of formation of $\Delta^{1,3}$ -cyclohexadiene from cyclohexene, II, 300.
- See also Carr, (Miss) E. P.
- Stuewer, R. F., and Olsen, A. G., pectin. V. Organic base derivatives of pectinic and pectic acids, II, 323.
- Stuhlinger, E., neutron spectra of the elements boron and beryllium on bombardment with α -rays, I, 52.
- See also Hazel, O.
- Stuhlman, O., jun. See Lyddane, R. H.
- Stuhlweissenburg, E., double and triple coincidences with ultra-radiation impacts, I, 188.
- Stukalova, M. M. See Toropov, N. A.
- Stukov, A. P. See Nametkin, S. S.
- Stull, A. See Cooke, R. A., Hampton, S. F., and Sherman, W. B.
- Stumpf, W. See Müller, Ernst.
- Stupotschenko, E. V., possible mechanism of the influence of pressure on chain gas reactions, I, 120.

- Sturdza, N. See Stamatescu, S.
- Sturgess, V. C. See Lawrence, W. J. C., and Scott-Moncrieff, R.
- Sturgis, C. C. See Isaacs, R.
- Sturgis, S. H., and Albright, F., mechanism of oestrin therapy in relief of dysmenorrhoea, III, 661.
- Sturm, E. See MaeFadyen, D. A.
- Sturm, E. A. See Sekkubara, M. N.
- Sturrock, J. G. R. See Bell, R. P.
- Sturtevant, A. H., new inherited character in man, III, 465.
- Sturtevant, J. M., heat of dilution of aqueous hydrochloric acid at 25°, I, 218. Heats of dilution of aqueous solutions of glycine at 25°, I, 361. Heat of dilution of aqueous sodium hydroxide solutions at 25°, I, 441.
- See also Berry, K. L.
- Stutsman, P. S., and Adkins, H., hydrogenation of α -diketones to ketols, II, 67.
- Stutzman, J. W., and Orth, O. S., actions of methyladrenaline; methadren, III, 678.
- Styns, J. See Berghe, L. van den.
- Subbaramaiah, K., colloid optics. III. Scattering of light by stearic acid hydrosols and by sodium stearate sols and gels, I, 71.
- Subbaraman, P. R., and Krishnaswami, K. R., rapid volumetric determination of iron and titanium; application to ilmenite analysis, I, 270.
- Subbaraya, T. S., Seshadri, K., and Rao, N. A. N., interaction of atomic energy levels. I—III, I, 88, 241, 305.
- Subbarow, Y., and Trager, W., chemical nature of growth factors required by mosquito larvae. II. Pantothenic acid and vitamin-B₆, III, 673.
- See also Alexander, B., Brues, A. M., György, P., Hitchings, G. H., and Rane, L.
- Subnis, C. W. See Deshapande, S. S.
- Subrahmanyan, V., Green, D. E., and Gordon, A. H., isolation of a catalytically active flavoprotein from liver, III, 260.
- See also Fisher, R. B., Gordon, A. H., Green, D. E., and Herbert, D.
- Subramaniam, V. K. See Varma, P. S.
- Suchtelen, H. van. See Boeke, J.
- Sucksmith, W. See Pickles, A. T.
- Sudds, M. V. N., cell contents of adrenal cortex, III, 726.
- Sudo, T., iron ore deposits in Manchoukuo, I, 179.
- Sudranski, H. F., relation of dynamic to static refraction in presbyopic patients 40—50 years of age, III, 489.
- Süe, P., thermal equilibrium between niobium pentoxide and carbon, I, 27.
- Süllmann, H., and Brückner, R., production and degradation of glycogen in retina extracts, III, 535.
- and Vos, T. A., glycolysis in retina extracts, III, 686.
- See also Birkhäuser, H., and Weekers, R.
- Sümege, S., and Putnoky, J., heavy metal poisoning, thyroid function, and porphyria, III, 443.
- Suer, W. J. See Fischer, M. H.
- Suess, H., radioactivity of potassium as a means of estimating its relative age in meteorites, I, 84.
- Suga, T. See Takamine, T.
- Sugar, O., and Gerard, R. W., spinal cord regeneration in rat, III, 482.
- Sugarman, N. See Freed, S.
- Sugasawa, S., and Lee, N., synthesis of nitrogen ring compounds. XVIII. 4th Group; synthesis of condensed nitrogen ring systems. III. Synthesis of octahydropyridocoline, II, 53. Oxidation of β -phenylethylpyridinium salts. II, II, 314.
- Sakurai, K., Fujisawa, M., and Sugimoto, N., synthesis of nitrogen ring compounds. XIX. Synthesis of isoquinolines having N-hetero-ring in 1-position, II, 234.
- Sakurai, K., and Okayama, Tosiyo, synthesis of emetine and its analogues; oxidation of 3-carbalkyloxy-1- β -phenylethylpyridinium salt [bromide], II, 356.
- Sugawara, K., chemical studies in lake metabolism, I, 135.
- Sugawara, Y. See Okuda, T.
- Sugaya, K., purification of carboxylase, III, 765. Analysis of zymase, III, 766.
- Sugden, S. See Elliott, G. A., and Nettleton, H. R.
- Sugg, J. Y. See Neill, J. M.
- Sugi, Y., origin of injury potential of muscle. I and II, III, 796.
- Sugihara, G., prophylactic effect of yakriton against dinitrophenol poisoning, III, 929.
- Sugimoto, A. See Amaki, T.
- Sugimoto, N. See Sugawara, S.
- Sugita, Y., colloid-chemical causation of opalescence of the lens, III, 203.
- Sugiura, K., biological measurement of γ rays in "equivalent roentgens" with mouse sarcoma 180 as test object, III, 228. [Tumours in] animals painted with tobacco tar, III, 423.
- See also Kensler, C. J.
- Sugiura, T. See Kamiyama, M.
- Sugiyama, G., constituents of a fish bile, III, 137.
- Suh, T. H., Chang, Y. C., and Chang, I., relative changes of blood- and cerebrospinal fluid-sugar in schizophrenic patients treated with insulin, III, 571.
- Suhrmann, R., transformation of light energy into free electron energy, similar to phosphorescence, I, 424.
- and Berndt, W., irreversible variation of the electrical resistance and light-reflecting power of antimony, arsenic, tellurium, iron, and silver layers condensed at low temperatures, I, 288.
- and Klein, P., determination of integral extinction equivalents of liquid hydrocarbons by means of absorption measurements in the infra-red spectrum, I, 145.
- and Kundt, W., mechanism of secondary electron emission, I, 51.
- Sukegawa, H. See Katuki, S.
- Snkhatankar, D. R. See Jadhav, G. V.
- Sulkin, S. E., and Nagle, N., demonstration of rabies virus in grossly decomposed animal brains, III, 78.
- and Willett, J. C., triple sugar-ferrous sulphate medium for identification of enteric organisms, III, 541.
- Sulkowitch, H. W. See Albright, F.
- Sullivan, C. J., and Vaughan, W. T., highly concentrated pollen extracts and their deterioration in various media, III, 255.
- Sullivan, J. T., determination of hydrocyanic acid in plant tissue by the picric acid method and the KWSZ photometer, III, 175.
- Sullivan, M., manganese hydroxide in skin diseases, III, 336.
- Sullivan, M. W. See Book, M. H.
- Sullivan, M. X., and Hess, W. C., cystine content of insulin; acid-sensitivity of different preparations, III, 209.
- Hess, W. C., and Smith, E. R., comparison of colorimetric and polarographic methods in relation to cystine content of insulin, III, 209.
- See also Everitt, E. L.
- Sullivan, N. P., and Manville, I. A., relationship of diet to self-regulatory defence mechanism. I. pH and bacterial flora, III, 39.
- See also Manville, I. A.
- Sullivan, W. A. See Fardon, J. C.
- Sullivan, W. H. See Fajans, K.
- Sulman, F., and Sklow, J., gonadotropic response to subcutaneous and intraperitoneal injections of urine prolactin in white rats, III, 737.
- See also Zondek, B.
- Sulzberger, M. B., symposium on allergic dermatoses; contact-type eczematous dermatitis, III, 339.
- and Baer, R. L., whealing capacity of skin of newborn or young infant, III, 680.
- See also Goodman, J.
- Sumarokova, T. See Usanovitch, M. I.
- Sumerford, W. T., and Hartung, W. H., 4-nitroso- and 4-amino-thymol, II, 166.
- Hartung, W. H., and Jenkins, G. L., Schiff bases from p -aminothymol, II, 346.
- Sumi, M., and Akō, T., vitamin-B₂ (flavin) contents of foods. II. Certain aquatic products, III, 514.
- Matsumiya, S., and Sato, K., histological studies of bone changes brought about by strontium carbonate, III, 701.
- Sumin, I. G. See Petrov, A. D.
- Summerbell, R. K., and Umhoefer, R. R., monoalkyldioxans, II, 22. Dioxadiene, II, 23.
- Summerfeldt, P., and Brown, A., osteodystrophia fibrosa, III, 2.
- See also Lucas, G. H. W.
- Summerson, W. H., combination simple manometer and constant-volume differential manometer for studies in metabolism, III, 176.
- See also MacLeod, J.
- Sumner, F. B., quantitative changes in pigmentation, resulting from visual stimuli in fishes and amphibia, III, 722.
- and Sargent, M. C., physiology of warm spring fishes, III, 746.
- Sumner, J. B., and Dounce, A. L., carotene oxidase, III, 161. Dihydroxymaleic acid oxidase, III, 764.
- and Sumner, R. J., coupled oxidation of carotene and fat by carotene oxidase, III, 764.
- Sumner, R. J. See Sumner, J. B.
- Sumwalt, M. See Eddy, N. B.
- Sun, C. J., and Rang, S. C., use of "distibinyl" in treatment of Chinese kala-azar, III, 928.
- Sunagawa, G. See Kitimura, R.
- Sundberg, O. E. See Seaman, W.
- Sunde, C. J., Johnson, G., and Kade, C. F., separation of the isomeric 1:4-dibromodinitrobenzenes and their reactions with p -phenylenediamine, II, 9.
- Sunderland, S., projection of cerebral cortex on pons and cerebellum in macaque monkey, III, 298.
- Sunderman, F. I. J. See Bazett, H. C.
- Sunderman, F. W. See Rose, E.

- Suntzeff, V., Babcock, R. S., and Loeb, L., reversibility of hyalinisation in mouse uterus produced by oestrogen, and changes in mammary gland and ovaries after cessation of injections, III, 653. Development of sarcoma in mice following long-continued injections of a buffered solution of hydrochloric acid, III, 669.
- Suomalainen, P., artificial hibernation, III, 150. Serum- and liver-carotene content in hedgehogs, III, 427. Carotene and vitamin-A metabolism of hibernating hedgehogs, III, 592.
- Surányi, L. A. See Hess, K.
- Sure, B., influence of massive doses of vitamin-B₁ on fertility and lactation, III, 321.
- [with Beach, A.], essential nature of choline for lactation and growth of albino rats, III, 510. Requirements of the components of the vitamin-B complex for lactation and growth of nursing young of albino rats, III, 512.
- Surfleet, H., and Porter, G. V., examination and standardisation of magnesium trisilicate, I, 418.
- Surmatis, J. D. See Whitmore, F. C.
- Surrey, A. R., and Lindwall, H. G., sulphides and sulphones of pyridine and quinoline, II, 106. Reaction of 2-chloro-5-nitropyridine and thiocarbamide, II, 330.
- Suschtschik, R. J. See Pokrovskaja, E. S.
- Suskind, F. H. See Grace, A. W.
- Sutcliffe, F. K. See Jacob, (Miss) A.
- Suter, C. M., and Weston, A. W., fluorine and chlorine derivatives of sulphanilamidobenzenesulphonic acids, II, 164.
- Suter, G. M. See Beck, H. G.
- Suter, L. C. See Steinberg, C. L.
- Sutherland, C. G., Roentgen therapy of inflammatory conditions, III, 342.
- See also McCullough, J. A. L., and McIntosh, J. F.
- Sutherland, G. B. B. M., spectroscopic determination of carbon-chlorine distance in methyl chloride, I, 7. High-frequency perpendicular fundamental vibration of the ammonia molecule, I, 8. Determination of internuclear distances and dissociation energies from force constants, I, 198. Investigation of hydrogen bonds by infrared absorption spectra, I, 400.
- Lee, E., and Wu, C. K., dimensions of phosphine and arsine molecules and possibility of optically active derivatives, I, 60.
- and Tuttle, W. T., absorption of multi-molecular films in the infra-red, I, 7.
- Sutherland, J. D. See Davidson, S.
- Sutherland, K. L., use of adsorption processes for detection of "traces," I, 269.
- Sutherland, M. L. See James, N.
- Sutherland, R. T., antitoxin in staphylococcal septicaemia, III, 922.
- Sutherlin, L., and Cherry, R. H., electrometer valve for laboratory and industrial use, I, 446.
- Sutliff, W. D. See Friedemann, T. E.
- Sutro, C. J., effects of subcutaneous injection of oestrogen on skeleton in immature mice, III, 736.
- and Pomerantz, L., transplantation of tooth germ elements to marrow cavities of tibias of kittens, III, 86. Effect of experimentally formed tumours on musculo-skeletal system of rat, III, 588. Effects of oestrogen on bones, joints, and ligaments of castrated guinea-pigs, III, 622.
- Suttenfield, F. D., proposed phenolphthalein test for determining presence of gastro-intestinal lesions; results in 94 cases, III, 218.
- Sutter, M. See Reich, H.
- Sutton, D. C., and Ashworth, J., cachexia responding to extract of anterior lobe of the pituitary, III, 730. Interrelation between vitamin-B complex and anterior pituitary gland, III, 847. Intravenous sodium salicylate and sodium iodide in sciatica, III, 110.
- Sutton, L. E., present state of valency theory, I, 284.
- See also Hugill, J. A. C., and Skinner, H. A.
- Sutton, R. B. See Barkas, W. H., Creutz, E. C., and Herzberg, G.
- Sutton, R. M., retinal after-image and judgement of size, III, 398.
- Sutton, R. W., and Hitchen, O., determination of benzoic acid, II, 386.
- Sutton, T. S. See Phillips, J.
- Sutton, W. R., changes produced in growth, reproduction, blood, and urine of cats by salts of zinc, cadmium, and beryllium, III, 442.
- Sutton, W. S., bacteriophage in a pure strain culture of *Streptococcus cremoris* in New South Wales, III, 357.
- Suzanne, M. See Peyron, A.
- Suzue, K., Okita, M., and Saito, M., tumour and growth substance, III, 671.
- Suzuki, A. See Mizushima, S.
- Suzuki, K., sensitivity of Nessler's solution, I, 393.
- Suzuki, Kohei, alkaloids of *Stemona tuberosa*, Loureiro. IV. Stemonidene, II, 237.
- See also Kondo, H., and Tsuda, K.
- Suzuki, M., nerve stimulation with electronic saturation currents, III, 797.
- Suzuki, Masami, biochemistry of carbohydrates. L. Prosthetic group of corneal mucoid. LI. Carbohydrate grouping of mucin from vitreous humour, III, 667.
- See also Masamune, H.
- Suzuki, T. See Mayeda, Y.
- Svedberg, T. See Grålen, N.
- Sveinsson, S. L. See Larsson, P. A.
- Svensson, H., theory of crossed slit method of observation [of concentration gradients], I, 271.
- See also Tiselius, A.
- Sveschnikov, N. N., and Levkoev, I. I., polymethine dyes of the 3-hydroxythionaphthen series. I. Condensation of 3-hydroxythionaphthen with *NN'*-diphenylformamidine and with the dianils of malonic and glutaric aldehydes, II, 381.
- Svidar, G. N. See Bagchi, K. N.
- Svigoo, A. C. See Gilman, H.
- Svirbelly, J. L., vitamin-C studies in the rat; effect of copper and various organic substances, III, 53.
- Svirbelly, W. J., and Lander, J., critical increment of ionic reactions. V. Influence of dielectric constant and ionic strength, I, 121.
- See also Rampino, L.
- Swaby, R. J., occurrence and activities of *Azotobacter* and *Clostridium butyricum* in Victorian soils, III, 352.
- Swalbach, W. G. See Madden, S. C.
- Swales, W. E., use of phenothiazine as anthelmintic for sheep, III, 924.
- and Collier, H. B., effects and excretion of phenothiazine when used as an anthelmintic for sheep, III, 924.
- Swales, W. E., and Froman, D. K., apparatus for measuring the "flash" thermal death point of microscopic animal organisms and its use with ova of *Ascaris lumbricoides*, III, 274.
- Swalm, W. A., and Morrison, L. M., treatment in chronic gastritis, III, 35.
- See also Morrison, L. M.
- Swaminathan, M., influence of varying levels of calcium intake on biological value of proteins, III, 142. Urinary excretion of nicotinic acid, III, 313. Determination of vitamin-B₆ in foods by means of the diazo-reaction and the phenol reagent, III, 594.
- See also Aykroyd, W. R., and Shourie, K. L.
- Swamy, B. G. L., and Sreenivasaya, M., insects as test animals for nutritional and vitamin studies, III, 51.
- Swan, G. A. See Clemo, G. R.
- Swan, K. C., Trussell, R. E., and Allen, J. H., *pH* of secretion in normal conjunctival sac, III, 202.
- Swaney, M. W., Skeeters, M. J., and Shreve, R. N., germicidal mercury derivatives of pyridine, II, 199.
- Swank, R. L., avian thiamin deficiency, III, 914.
- Swann, H. G., sodium chloride and diabetes insipidus, III, 28.
- Swann, W. F. G., showers produced by penetrating rays and allied phenomena, I, 189.
- and Ramsey, W. E., shower production by mesotrons in different materials, I, 280. Existence of mesotron showers, I, 309. Secondary peak in the Rossi curve for tin, I, 427.
- Swanson, C. P., acenaphthene in pollen tube technic, III, 702.
- Swanson, E. E., pharmacology of tutin and its antagonism with sodium amylal, III, 335.
- and Chen, K. K., aberrant action of sodium 5- α -dimethylbutyl-5-ethyl-barbiturate, III, 335.
- See also Lee, H. M.
- Swanson, L. W. See De Gowin, E. L.
- Swanson, T. B. See Cooke, R. G.
- Swanson, W. F. See King, C. G.
- Swanson, W. W., and Iob, V., growth and chemical composition of human skeleton, III, 621.
- See also Iob, V.
- Swaroop, S., size of samples for establishing difference in responses to different treatments, III, 824.
- See also Napier, L. E.
- Swart, H. A. See Thornhill, W. A.
- Swartz, J. B. See Buswell, A. M.
- Swartz, J. H., treatment of fungous infections with ethyl iodide inhalations, III, 247.
- Swedin, B., and Theorell, H., dihydroxymaleic acid oxidase action of peroxidases, III, 345.
- Sweeney, P. A. See Walker, T. F.
- Sweet, W. H. See Bailey, P.
- Swern, D. See Scanlan, J. T.
- Swett, W. W., Matthews, C. A., and Graves, R. R., extreme rarity of cancer in the cow's udder: negative finding of vital interest to the dairy industry and to the consumer, III, 912.
- Swientoslawski, W., apparatus for observing critical phenomena in the stationary state, I, 234.
- Swift, E. H. See Axelrod, J., and Billheimer, J. S.
- Swift, H. F. See Smadel, J. E.

- Swift, R. W., and Forbes, R. M., heat production of the fasting rat in relation to the environmental temperature, III, 325.
- See also Forbes, E. B.
- Swift, S. R. See McGookin, A.
- Swigert, V. W. See Gibson, J. G., jun.
- Swindell, G. E. See Lunt, R. W.
- Swineford, O., jun., catalpa as a cause of hay fever, III, 938.
- Swings, P., Edlén, B., and Grandjean, J., new identification of Fe III in the spectra of early B stars, I, 88.
- and Struve, O., spectrum of RW Hydrae, I, 399. Spectrum of BD +30° 3639, I, 423.
- Swinyard, C. A., volume and corticomedullary ratio of adult human adrenal gland, III, 726.
- and Bruner, H. D., compensatory hypertrophy of dog's adrenal following unilateral adrenalectomy, III, 728.
- Swislowsky, J. See under Swiss, J.
- Swiss, J., derivatives of 1-, 4-, 6-, and 9-substituted dibenzfurans, II, 259.
- See also Gilman, H.
- Switzer, G., granite pegmatites of the Mt. Antero region, Colorado, I, 179.
- Swyngedaauw, J., electrolysis and electroosmosis in gelatin, I, 72.
- Sydenstricker, V. P., Geeslin, L. E., Templeton, C. M., and Weaver, J. W., riboflavin deficiency, III, 233.
- Geeslin, L. E., and Weaver, J. W., avitaminosis in diabetics under insulin therapy, III, 429.
- Schmidt, H. L., Geeslin, L. E., and Weaver, J. W., liver in pellagra, III, 220.
- Sebrell, W. A., Cleckley, H. M., and Kruse, H. D., ocular signs of arboflavinosis, III, 891.
- See also Kruse, H. D.
- Sykes, C. See Bradley, A. J.
- Sykes, J. F. See Alfredson, B. V.
- Sykowski, P., Fazekas, J. F., and Himwich, H. E., formation of acetylcholine by tissues of rat, III, 238.
- Sylvan, S. See Alwall, N.
- Sylvén, B., liberation of sulphuric acids from granules of mast cells in subcutaneous connective tissue after exposure to X- and γ -rays, III, 880.
- Synge, R. L. M., amino-acids. I. Partition of acetamido-acids between immiscible solvents. II. Separation of amino-acids by means of their N-acetyl derivatives. III. Isolation of hydroxy-amino-acids from protein hydrolysates. IV. Methyl ethers of some N-acetylhydroxyamino-acids, II, 37.
- See also Martin, A. J. P.
- Syverson, J. T., and Berry, G. P., sarcomata and carcinomata induced in cotton-tail rabbits by methylcholanthrene, III, 669.
- See also Lawrence, J. S.
- Sza, C. H. See Chi, Y. F.
- Szabo, F. See Mezincesco, M. D.
- Szabó, I., hypertrophy in pseudopregnant uterus of mouse following mechanical stimulation or treatment with vitamin-E, III, 737.
- Szabó, Z. See Petrovits, L.
- Szabolcs, Z. See Findeisen, L. F.
- Szabuniewicz, B., electronegativity of injured parts in skeletal muscles, III, 19.
- Polarisation currents in frog muscles, III, 19.
- Szakáll, A., and Szakáll, B., method of chlorine balance in man, III, 329.
- Szakáll, B. See Szakáll, A.
- Szarka, A., effect of gonadotropic hormone on uterus of infantile mice, III, 121.
- Szász, S. See Angelescu, E.
- Szego, C. M., and Samuels, L. T., reagent for determination of œstrone, III, 581.
- Szent-Györgyi, A., biological oxidation and vitamins, III, 914.
- Szép, O. See Bodnár, J.
- Szepsenwol, J., determination of bipolarity in ganglion cells, III, 297.
- See also Rojas, P.
- Szigeti, J. See Nichita, G.
- Szivevsky, G., optical phenomena in active crystals, I, 433.
- Szobonya, M. See Csínády, E. von.
- Szolnok, Z., vitamin-C treatment of inner ear deafness and tinnitus, III, 492.
- Szreder, W., effect of drugs on leucocyte count and treatment of leukemia, III, 556.
- Szymanowicz, R., and Porter, B. H., wettability of highly polished metal surfaces by graphite hydrosols, I, 377.
- T.
- Ta, Y., dichroism of an iodoform crystal in the infra-red, I, 145.
- See also Vodar, B.
- Tabone, J. See Sándor, G.
- Taboury, M., and Nerissou, oxidation of lead in air in presence of distilled water, I, 228.
- Tache, S. See Ludwig, A.
- Tadakoro, T., and Kobayashi, S., chemical constituents [accompanying] the formation of cellulose, III, 274. Constituents of cellulose-forming portions of young plants. II, III, 831.
- Taddei, C. See De Diesbach, H.
- Tadros, W. See Schönberg, A.
- Taebel, W. A., modified Jones reductor, I, 43. Weighing bottle, I, 273.
- Taeger, H., experiences with depot insulin, III, 305.
- Taffel, M. See Darrow, D. C., and German, W. J.
- Taft, A. E., study of arachnoidpia, III, 636.
- Taft, J. W. See Atwell, W. J.
- Taft, R. B., small portable Geiger-Müller counters, I, 176.
- Tager, B. N. See Shelton, E. K.
- Taghavi, H. See Polonovski, M.
- Taher, N. A., rates of reaction of p-alkylbenzhydriyl chlorides with ethyl alcohol, I, 222.
- See also Bateman, L. C., Church, M. G., and Hughes, E. D.
- Tainsh, P., and Wilkinson, H., biological standardisation of vitamin-A, III, 143.
- Tainter, M. L., Footer, A. W., and Hanzlik, H., sympathomimetic stimulants in acute circulatory failure of phenol shock, III, 248.
- Kulchar, G., and Stockton, A. B., elkonite, a colloidal clay, I, 397.
- See also Morton, M. C., and Sehulte, J. W.
- Takada, T. See Kanamaru, K.
- Takagi, M., statistical domain theory of ferromagnetic crystals. I. Magnetisation and magnetostriction. II. Mutual action of magnetism and mechanical force, I, 152.
- Takagi, S., b.p. of system formic acid-water, I, 106.
- and Oomi, S., vapour pressure of hydrated crystals of oxalic acid and sodium formate, I, 118.
- Takahashi, I., anaphylaxis of blood cells. I.—III, III, 787.
- Takahashi, Kenzo. See Nakahara, W.
- Takahashi, Kiyoki, and Umeda, T., histaminase. I. Chemical determination of activity, III, 71.
- Takahashi, Kumao, taurocholaso and glycocholaso in tissues, III, 137. Cholaso in organs, bacteria, and fungi, III, 685.
- and Mori, T., bile of *Conger myriaster* and *Pararulus asotus*, III, 851.
- See also Yamasaki, Kazumi.
- Takahashi, M. See Uehara, Y.
- Takamatsu, A., and Sato, S., effect of yakriton in epilepsy, III, 890.
- Takamatsu, H., histological and biochemical detection of phosphatase in tumours. III, 671.
- Takamine, T., Suga, T., and Tanaka, Y., shift of intensity in N_2^+ bands excited in helium and neon, I, 87.
- Takaoka, M., phenolic substances of white hellebore (*Veratrum grandiflorum*, Loes. Fil.), II, 328.
- Takase, S. See Ueno, S.
- Takata, T. See Atsuki, K.
- Takayama, Y., closing mechanism of umbilical ring, III, 834.
- Takebayashi, M., effect of reduced nickel on addition of hydrogen bromide to undecenoic acid in various solvents, II, 322. Influence of aldehydes and hydroxyaldehydes on the addition of hydrogen bromide to undecenoic acid in presence and in absence of oxygen or reduced nickel, II, 322.
- Takeda, Keinosuke. See Kuwada, S.
- Takeda, Keniti. See Kondo, H.
- Takei, S., Ono, M., and Sinosaki, K., leaf-alcohol. IV. *cis* and *trans* problem of leaf alcohol, the natural Δ^7 -hexenol, II, 335.
- Takenaka, S., and Hatakeyama, Y., work done in lifting and lowering of weights, III, 480.
- Takenouti, T., change of circulating blood volume after blood transfusion and infusion of gum saline in normal and splenectomised rabbits, III, 882.
- Takizawa, N., experimental production of sarcomas in mice by injection of glucose, fructose, and galactose; histogenesis of fibroplastic sarcomas, III, 505.
- Talbot, F. B., and Talbot, N. B., disorders of internal gland secretion in children, III, 893.
- Talbot, N. B., inactivation of endogenous œstrogen by the liver, III, 213.
- Butler, A. M., and MacLachlan, E., colorimetric assay of total, α - and β -17-keto-steroids in extracts of human urine, III, 314.
- and Langstroth, G. O., extractor for urinary androgens, III, 216.
- Lowry, O. H., and Astwood, E. B., influence of œstrogen on electrolyte pattern of immature rat uterus, III, 653.
- Stewart, A. H., and Broughton, F., prediction of basal heat production from urinary creatinine, III, 55.
- Wolfe, J. K., MacLachlan, E., Karush, F., and Butler, A. M., colorimetric assay of weak phenolic ketones, "œstrone," in extracts of human urine, III, 736.
- and Worcester, J., basal metabolism of obese children, III, 517.
- Worcester, J., and Stewart, A., new creatinine standard for basal metabolism and its clinical application, III, 753.

- Talbot, N. B. See also Bntler, A. M., Langstroth, G. O., and Talbot, F. B.
- Talbot, J. H., serum-urate in relatives of gouty patients, III, 707.
- and Brown, M. R., potassium chloride treatment of Ménière's syndrome, III, 301.
- and Coombs, F. S., blood studies in pemphigus, III, 473.
- Lever, W. F., and Consolazio, W. V., metabolic studies on patients with pemphigus; [treatment with adrenal cortex and saline], III, 643.
- See also Consolazio, W. V., Coombs, F. S., and Lever, W. F.
- Talce-Niedra, D., adsorption of rennin, III, 347. Activators of bacterial rennin, III, 533.
- Talenti, M. See Foschini, A.
- Taliaferro, I. See Haag, H. B.
- Talibov, D. G. See Kozlov, V. V.
- Tallman, R. C. See Shukis, A., jun.
- Talmud, B. A., and Talmud, D. L., catalytic activity of enzymes on organic adsorbents, I, 22.
- Talmud, D. L., models of protein molecules, II, 199.
- See also Talmud, B. A.
- Tamamushi, Y. See Ochiai, E.
- Tamarskaja, R. I., alkaloids of cinchona leaves, II, III, 696.
- Tamblyn, J. W., and Forbes, G. S., photochemistry of di-iodoacetylene and tetra-iodoethylene, I, 124.
- Tambovtzeva, N. D. See Tzukervanik, I. P.
- Tamini, E. See Ranzi, S.
- Tamura, M. See Okada, T.
- Tamura, T. See Ishida, Y.
- Tan Hong Yam. See under Yam, T. H.
- Tanabe, Y., biochemistry of carbohydrates. XLIX. Submaxillary mucin and mucoid, III, 667.
- Tánago, J. G. See Portillo, R.
- Tanaka, J., synthesis of 3-indolylacetic acid, II, 330.
- See also Nakamura, H.
- Tanaka, T., effect of camphor and menthol on *in vitro* culture of fibroblasts, III, 66. Influence of emetine and lycorine on *in vitro* cultures of fibroblasts, III, 702.
- See also Ogata, A.
- Tanaka, Y. See Takamine, T.
- Tananaev, N. A., theory of L_p . V. L_p , percentage completion of reaction, and the equilibrium coefficient, I, 25.
- and Karjakin, J. V., p_H values of salts as an aid to their identification, I, 329.
- and Vereschnja, P. F., determination of lead sulphate, considered from viewpoint of the rule of residues and of substitution, I, 81.
- Tanasescu, L., and Ionescu, M., photochemical reactions in the *o*-nitrobenzylidene acetals series. XIII. *o*-Nitrobenzylidenexylose and -cyclohexane-1:2-diol. XIV. Constitution of the di-*o*-nitrobenzylidene acetals of glucose, galactose, and mannose and of their products of photochemical isomerisation. XV. Attempted syntheses of disaccharides, II, 154.
- Tanasoa, T. See Dimitriu, C. C., and Tudoranu, G.
- T'ang, B. H. Y., and Wang, S. H., clinical application of plasma viscosity determination with description of a pipette viscosimeter, III, 881.
- Tang, P. S., and Loo, W. S., polyploidy in soya bean, pea, wheat, and rice, induced by colchicine treatment, III, 547.
- See also Hsü, J.
- Tang, T. H., Wang, W. C., and Peng, C. C., female hormone [oestrogen] in bituminous coal from Shantung province, III, 810.
- Tang, T. L. See Burgoyne, J. H.
- Tang, Y. T., Pelidisi index in Chinese children, III, 671.
- Tange, U., vitamin- B_2 complex. V. Effect of carbohydrate on vitamin- B_2 deficiencies; flavin synthesis in rats. VI. Rat acrodynia and fatty acids, III, 513.
- Tani, H. See Go, Y.
- Tani, T., agglutination of syphilis spirochaete, III, 612.
- Taniguti, M. See Asano, M.
- Tanikawa, Y. See Sakata, S.
- Tankard, A. R. See Bagnall, D. J. T.
- Tannenbaum, A., initiation and growth of tumours. I. Effects of underfeeding, III, 506. Relationship of body-weight to cancer incidence, III, 554.
- Tanteri, B., magnetite in sand at estuary of the [River] Simeto [Sicily], I, 86.
- Tanzi, B., reticulocytosis and corpuscular resistance during experimental phenylhydrazine anaemia, III, 376. Changes in phosphorus: nitrogen and calcium: nitrogen in bones of rats due to continued administration of sodium bromide, and of haematoporphyrin, III, 432. Effect of X- and radio waves on spleen-cathepsin, III, 448. Spleen-cathepsin during experimental phenylhydrazine anaemia, III, 448. Spleen, growth, and secondary sexual characteristics in fowls, III, 745. Determination of glycerol-splitting activity of bacteria, III, 768.
- Tao, H. See Cheng, L. T.
- Tapadinhas, J. See Jacobsohn, K. P.
- Tape, G. F., β -spectra of iodine, I, 53.
- and Cork, J. M., induced radioactivity in tellurium, I, 339.
- Tapp, J. S., automatic multiple burette, I, 395.
- Tapp, W. J. See Snyder, H. R.
- Tappe, W. See Hüchel, W.
- Tappi, G., and Demorra, (Signa.) A., structure of *o*-dinitrosobenzenes, II, 58.
- and Di Vajo, U., dioximes. CXXIV., II, 58.
- and Springer, C., electric moment of isooxazoles, I, 347.
- See also Mazza, F. P., and Milone, M.
- Taquini, A. C., production of pressor substance by totally ischaemic kidney, III, 793.
- See also Houssay, B. A.
- Tarama, K. See Matsumura, S.
- Taransky, A. A. See Viehoever, A.
- Tarasov, L. P., ferromagnetic anisotropy; dependence on field strength; iron and iron-rich silicon alloys; low-nickel alloys of iron, I, 101.
- Tarasov, V. V., and Bering, B. P., theory of metallic state. I, I, 18.
- Tarasova, G. A. See Turova-Pollak, M. B.
- Tarbell, D. S., and Kincaid, J. F., Claisen rearrangement. II. Kinetic study of rearrangement of 2:6-dimethylphenyl allyl ether in diphenyl ether solution, II, 215.
- See also Kincaid, J. F.
- Tarlov, I. M., origin of perineural fibroblastoma, III, 570.
- Tarnowski, A. See Bloch, L. H.
- Tarr, L., and Ferris, H. W., multiple myeloma, III, 229.
- Tartakovskaja, V. E. See Roginski, S. Z.
- Tartar, H. V., and Cadle, R. D., sulphonates. VI. Effect of sodium chloride on the solubility of sodium dodecanesulphonate and sodium tetradecanesulphonate; solubility of 50° of calcium dodecanesulphonate and calcium dodecyl sulphate in aqueous solutions of the corresponding sodium salts, I, 108.
- Sivertz, V., and Reitmeier, R. E., surface tension of aqueous solutions of some paraffin-chain colloidal electrolytes, including a comparison of the capillary rise and sessile bubble methods of measurements, I, 438.
- See also Huey, C. S., Reitmeier, R. E., and Sivertz, V.
- Tartar, V., and Chen, T. T., mating reactions of enucleate fragments of *Paramecium bursaria*, III, 687.
- Tartarini, G., analytical application of coordination compounds, I, 233.
- Tartter, A. See Wieland, H.
- Tarver, H. See Schmidt, C. L. A.
- Taschek, R. See Williams, Dudley.
- Taschner, L. E., comparative study of blood and cerebrospinal fluid by the Kahn, Kline, and Laughlen tests, III, 542.
- Tashiro, S., Smith, C. C., Badger, E., and Kezur, E., chromodacryorrhoea, a new criterion for biological assay of acetylcholine, III, 923.
- Tatarinov, B. P., and Levitski, M. V., determinations of specific conductivity of very dilute solutions of electrolytes, I, 74.
- Tate, J. T. See Baker, R. F., and Mann, M. M.
- Tatel, H. See Cork, J. M., and Staub, H.
- Tatevosjan, G. T. See Kazanski, B. A.
- Tatum, E. L., development of eye colours in *Drosophila*; bacterial synthesis of v^+ hormone, III, 114.
- See also Horsburgh, D. B.
- Tatwalkar, S. S. See Limaye, D. B.
- Taub, A. See Stern, S.
- Taub, A. H., spinor equations for the meson and their solution when no field is present, I, 5.
- Taubenhaus, M., Levine, R., and Soskin, S., effect of insulin on rate of appearance of free sugar in liver broil, III, 416.
- See also Soskin, S.
- Tauber, H., unsaturated fat oxidase, III, 914.
- Tauber, O. E. See Clare, S.
- Taurog, A. See Blacet, F. E.
- Taussig, A. E., and Somogyi, M., hyperglobulinemia in granuloma inguinale, III, 882.
- Tavrovskaja, R. M. See Lutschinski, G. P.
- Tawfik, Z. See Sartory, A.
- Tayeau, F. See Machebeuf, M. A.
- Taylor, A. (Manchester), and Laidler, D., anomalous diffractions in the Hull-Debye-Scherrer spectrum of graphite, I, 348.
- See also Bradley, A. S., and Lipson, H.
- Taylor, Alfred, implants of embryonic tissue inhibit parturition in rat, III, 661.
- Taylor, A. H. See Luckiesh, M.
- Taylor, A. R. (Durham, N.C.), Sharp, D. G., Finkelstein, H., and Beard, J. W., macromolecular components of chick embryo tissue diseased with virus of equine encephalomyelitis, III, 786.
- See also Sharp, D. G.

- Taylor, A. R. (Princeton, N.J.), Parpart, A. K., and Ballentine, R., rapid circulating dialyser, I, 134.
- Taylor, A. W., and Gordon, W. S., types of *Cl. welchii* present in soil and in the intestinal contents of animals and man, III, 540.
- See also Gordon, W. S.
- Taylor, D., and Ritchie, M., demonstration of thermal diffusion in liquids, I, 302.
- Taylor, D. B., mechanism of catalysis by onzymes, III, 447.
- Taylor, E. D., morphology of columbite crystals, I, 237. Stephanite morphology, I, 380.
- Taylor, E. L., does rabbit chew the cud? III, 39.
- Taylor, F. H. L., Lowell, F. C., Adams, M. A., Spring, W. C., jun., Finland, M., and Marean, N. E., comparative study of blood concentrations and urinary excretion of sulphapyridine and sulphanilamide after single doses of sulphapyridine and related compounds administered by various routes, III, 246.
- See also Finland, M., Gessler, C. J., Hall, M. G., Lozner, E. L., and Souter, A. W.
- Taylor, F. O. See Barthen, C. L.
- Taylor, F. W., and Michael, A. C., relation of blood- CO_2 and dehydration to gastric acidity, III, 499.
- Taylor, G. L., blood groups and their inheritance, III, 789.
- Race, R. R., Prior, A. M., and Ikin, E. W., weak "A" reaction in blood group "AB," III, 470.
- Taylor, G. W., optical properties of earthworm giant fibre sheath as related to fibre size, III, 714.
- Taylor, H., toxicity of coal-tar naphtha distillates, III, 156.
- Taylor, H. A. See Burton, M., and Henkin, H.
- Taylor, H. C., and Waltman, C. A., hyperplasias of mammary gland in women and mice, III, 670.
- Taylor, H. E. See Stier, T. J. B.
- Taylor, H. L., and Keys, A., mean molecular weights of synthetic mixtures of bovine plasma-albumin and -globulin, III, 839.
- See also Kremen, A. J.
- Taylor, H. M., and Cross, A. R., treatment of acute alcoholism with insulin, III, 578.
- See also McCrea, F. D.
- Taylor, H. S., and Smith, J. O., jun., reactions of methyl radicals with benzene, toluene, diphenylmethane, and propylene, I, 363.
- See also Joris, G. G., Moore, W. J., jun., and Woodman, J. F.
- Taylor, J. F., and Clark, W. M., metalloporphyrins. II. Cobalt and manganese mesoporphyrins in co-ordination with nitrogenous bases, II, 383.
- and Hastings, A. B., oxidation-reduction potentials of methaemoglobin-haemoglobin system, III, 296.
- See also Clark, W. M.
- Taylor, J. H., composite dike at Brockhill, Worcestershire, I, 333.
- Taylor, L. S., economic features of X-ray protection, III, 825.
- and Singer, G., measurement, in röntgens, of the γ -radiation from radium, I, 277.
- Taylor, L. W., and De Ome, K. B., failure of wheat-germ oil to prevent lymphomatosis in chickens, III, 91.
- Taylor, M. W. See Russell, W. C.
- Taylor, N. B. See Greenwood, W. F.
- Taylor, N. S., sulphapyridine in acute urethritis, III, 437.
- Taylor, R. M., and Dreguss, M., serial passage of human influenza virus in the European hamster (*Cricetus cricetus*), III, 543.
- Taylor, R. P. See Griffith, R. O.
- Taylor, S. See Crowley, N.
- Taylor, T. W. J., plant pigments in Galapagos islands, III, 832.
- Taylor, W. See Read, D. R.
- Taylor, W. H. See Chao, S. H.
- Tazaki, H., single crystals of metaboric acid; structure of orthorhombic metaboric acid, $\text{HBO}_2(\alpha)$; density of metaboric acid under heating, I, 246.
- and Huzita, M., effects of chemical combination on K β lines of chlorine, I, 241.
- Tazawa, Y., hydrolysis of *l*-histidine anhydride by pepsin, III, 347.
- Tchakirian, A., germanium; theories of organic and inorganic chemistry, I, 79.
- See also Servigne, M., and Volkringer, H.
- Tchang, J. L. See Fromageot, C.
- Toheng Mao-Lin, intensity variations of bright hydrogen lines in the spectrum of γ -Cassiopeia, I, 276.
- Tchibukmakher, N. B. See Shamboorov, D. A.
- Tchijevsky, A. L., treatment of bronchial asthma with ionised air, III, 194.
- Teague, D. M. See Erickson, B. N.
- Teague, R. S., biological assay of melanophore hormone of pituitary gland, III, 206.
- Relation of melanophore hormone to oxygen consumption of rat, III, 206.
- Teall, C. G., bone changes in hamolytic anaemia and leukaemia in children, III, 878.
- Teblich, W. See Kermack, W. O.
- Tedeschi, G., particular type of heterogeneous reaction, I, 223.
- Tecter, H. M. See Adams, R.
- Tei, H. S. See Uchikura, K.
- Teicher, I. See Rothenberg, R. E.
- Teichert, W., and Klemm, W., lattice of the high-temperature form of potassium hydroxide, I, 100.
- Hydrosulphides and hydroselenides of the alkali metals, I, 125.
- Teis, R. V., isotopic composition of water from rivers and lakes of the U.S.S.R., I, 135.
- Teiss, R. V., isotopic composition of rain water, I, 43.
- Teissier, G. See Drach, P.
- Telang, D. M., haemolysis, III, 557.
- Telang, M. S., and Nadkarny, V. V., kinetics of the reaction between potassium persulphate and the alkyl iodides. I. Influence of solvents, acids, and salts, II, I, 121, 325.
- Mechanism of reaction between persulphate and alkyl iodide, I, 363.
- Telegdi, I., vitamin-C requirements in typhoid fever, III, 235.
- Telfair, D. See Pielemeier, W. H.
- Telford, E. D., and Simmons, H. T., spinal anaesthesia in gastro-intestinal achalasia, III, 220.
- Telford, I. R., Emerson, Gladys A., and Evans, H. M., reduced muscle-creatine in paralysed young [vitamin]-E-low rats, III, 54.
- Histological changes in skeletal muscles of paralysed suckling young of [vitamin]-E-low rats, III, 106.
- Teller, E. See Breit, G., Brunauer, S., Haupt, R. F., Inglis, D. R., Nordhelm, G., and Seeger, R. J.
- Temperley, H. N. V., paramagnetic hysteresis, I, 103.
- Templeman, W. G. See Blackman, G. E.
- Templeton, C. M. See Sydenstricker, V. P.
- Templeton, H. J., cheilitis and dermatitis from resorcinol and hexylresorcinol, III, 864.
- Templeton, R. D., and Borkon, E. L., water and soap enemas, III, 134.
- See also Adler, H. F., Ferguson, R. L., and Tweedy, W. R.
- Ten Cate, J. See under Cate, J. ten.
- Tenenbaum, E., pure strain of *Trichomonas eberthi* in tissue culture, III, 467.
- See also Doljanski, L., and Hoffman, R. S.
- Tenery, R. M., and Anderson, C. E., photo-electric micro-determination of potassium in blood plasma by chloroplatinate precipitation, III, 883.
- Tennant, R. See Ott, L. H., and Oughterson, A. W.
- Tenner, K. T., action of A.T.10 in tetany, III, 304.
- Tenney, E., jun. See Parker, F., jun.
- Teodorescu, D., elastic properties of gelatin, I, 212.
- Teodorescu, E. See Vasilescu, C.
- Teodorovitch, G. I., genesis of the Novotroitsky iron ore deposit of the Khalilov type, I, 48.
- Teodoru, C., effect of alcohol and of camphorated alcohol on circulation and respiration in dog, III, 250.
- Effect of camphorated alcohol on circulation in the frog, III, 250.
- Teorell, T., permeability of the stomach mucosa for acids and other substances, III, 132.
- Primary acidity of gastric juice, III, 309.
- See also Stållberg, S.
- Terentieva, A. P. See Belousov, A. M.
- Terpstra, P., wooden balls for [molecular] structure models, I, 100.
- Terroine, E. F., sterols, III, 675. [Lipins], III, 675.
- and Bahad, P., regulation of nitrogenous metabolism; thyroxine and nitrogenous metabolism of growth, III, 303.
- Effect of cortin in creatine and creatinine metabolism at minimum nitrogen excretion level, III, 410.
- and Boy, G., action of benzoic acid on nitrogenous metabolism, III, 432.
- Terry, L. See Fauley, G. B.
- Terry, L. I. See Mason, J. P.
- Terry, L. L., and Beard, E. E., cure of type XIV pneumococcic meningitis by sulphapyridine, III, 330.
- and Reichle, H. S., ulceroglandular tularemia [treatment], III, 599.
- Terry, R. J., thoracic window for observation of the lung in living animal, III, 17.
- Measuring and photographing the cadaver, III, 782.
- Terry, T. L., and Mattis, R. D., plastic transilluminator, III, 395.
- Tertsch, H., two graphical methods for determination of optical data at given crystal faces, I, 40.
- Terui, Y., adsorption of electrolytes by active carbon; (application of polarographic method), I, 319.
- Teruoka, G., nutrition of the people in Japan, III, 229.
- Terzaghi, R. D., rapakivi of Head Harbor Island, Maine, I, 238.
- Teschen, H. See Mamoli, L.
- Tess, R. W. See Geissman, T. A.
- Tête, H. See Mouriquand, G.

- Tetzner, E., increase in sensitivity of ninhydrin reaction by addition of traces of ascorbic acid, III, 779.
- Teunissen, P., and Gorter, C. J., paramagnetic dispersion in iron ammonium alum, I, 64. Paramagnetic dispersion, I, 103.
- Thacker, E. J. See Forbes, E. B.
- Thaddeu, S., and Auersbach, K., provocation of acute adrenal insufficiency, III, 306.
- and Bakalos, D., diagnosis of atypical pernicious anaemia by sternal puncture, III, 182.
- and Sarkander, H., action of deoxycorticosterone in adrenal insufficiency, III, 306.
- See also Stroebe, F.
- Thakar, V. C. See Prasad, M.
- Thakurta, A. G., and Dutt, B. K., effect of indolylacetic acid on rooting in *Gootes* (Marcotte) of mango, III, 617.
- Thaler, H., and Geist, G., chemistry of ketone production in rancid fat. II. Production of methyl ketones from β -hydroxy-fatty acids by *Penicillium glaucum*, III, 166.
- Thalhimer, W., and Stillerman, M., prevention and modification of measles with concentrated pooled ascites fluid and its globulin fraction, III, 456.
- Thaning, T. See Jorpes, E.
- Thannhauser, S. J., mechanism of diabetic disturbance; "nitrogen minimum excretion" as measure of glyconeogenesis III, 434.
- and Reichel, M., animal lipins. XVI. Occurrence of sphingomyelin as a mixture of sphingomyelin fatty acid ester and free sphingomyelin, demonstrated by enzymatic hydrolysis and mild saponification. XVII. Synthesis of lignocerylphingosine fatty acid esters (sphingosine fats) and sphingosine amides (ceramides), II, 324.
- Sorkin, S. Z., and Boncoddio, N. F., amylolytic and phosphatase activity of liver tissue in von Gierke's disease, III, 742.
- Thatcher, F. S., osmotic and permeability relations in nutrition of fungus parasites, III, 460.
- Thatcher, O. J. See Greene, J. A.
- Thaxton, H. M., and Hoisington, L. E., phase shift calculations for proton-proton scattering at high energies, I, 92.
- and Monroe, A. M., proton-proton and proton-neutron interactions for the Morse potential, I, 139.
- See also Breit, G., and Eddington, (Sir) A. S.
- Thayer, (Miss) H. See Stücklen, (Miss) H.
- Thayer, S. A., McKee, R. W., Binkley, S. B., and Doisy, E. A., potencies of vitamin-K₁ and of 2-methyl-1:4-naphthoquinone, III, 916.
- See also Binkley, S. B., Huffman, M. N., MacCorquodale, D. W., McKee, R. W., and Richert, D.
- Thayer-Ojeda, T., formation of matter, I, 309.
- Theilacker, W., and Ozegowski, W., *pp'*-diradical of diphenyl, of the triphenyl-methyl type. I, II, 270.
- Theile, H., thermal decomposition of ethane under higher pressure, I, 29.
- Theis, M., specific action of ultra-short waves, I, 319.
- Thelander, H. E., perforation of gastrointestinal tract of newborn infant, III, 664.
- Thenebe, C. L., Hirshberg, M. S., and Borrow, A., sulphanimide amidopyrine therapy of pneumonia, III, 330.
- Theodore, F. H., and Ziporkes, J., congenital retinal fold, III, 722.
- Theodoresco, B. See Nestoresco, N.
- Théodoresco, (Mlle.) M., Raman spectrum of neutral tungstates in the crystalline state and in aqueous solution, I, 146. Raman spectrum of metatungstates in the crystalline state and in aqueous solution, I, 195.
- Theorell, H. See Swedin, B.
- Therman, P. O., rod and cone electroretinograms in relation to pigment migration in normal and adrenalinised frogs, III, 203. Action potentials of squid eye, III, 892.
- Forbes, A., and Galambos, R., electric responses derived from superior cervical ganglion with micro-electrodes, III, 714.
- See also Rosenbluth, A.
- Thewlis, J., examination of dental enamel by X-rays and the polarising microscope, III, 225.
- Thibaud, E., emission of ionising radiations by salts of ordinary metals, I, 137.
- Thibault, N. W., dichroscope, I, 175.
- Thibault, P., effect of the sugar-lipin antigen of Shiga's bacillus on bactericidal power of fresh rabbit serum, III, 76.
- See also Rist, N.
- Thibaut, J. See Welsch, M.
- Thiel, A., conception of osmotic pressure, I, 316.
- Thiel, C. C., influence of various factors on fermentation end products of heterofermentative lactobacilli, III, 934. Fermentation end-products of heterofermentative streptococci, III, 936.
- See also Davis, J. G.
- Thiel, G. A. See Sherman, G. D.
- Thiele, W., simple achlorhydric anaemia, III, 182. Disturbances of gastric acidity in hyperthyroidism, III, 303.
- and Scherff, I., importance of carotene and vitamin-A in serum, III, 673, 791. Serum-vitamin-A in fever, III, 857.
- Thiele, W. E. See Diels, O.
- Thienes, C. H. See Drake, M. E.
- Thiersch, H., infectious myxoma and experimental cholesterol-atheromatosis of rabbit, III, 589.
- Thiery, J. P. See Urbain, A.
- Thiessen, K. See Kaufmann, O.
- Thiessen, P. A., and Beger, E., determination of polarity of surfaces by polymeric adsorption, I, 110.
- and Schoon, E., surface covering and energy of adhesion of organic compounds, I, 319.
- and Schütza, H., oxidation of gold, I, 125.
- Thimann, K. V., growth hormones in plants, III, 459. Hormones and the analysis of [plant] growth, III, 942.
- and Commoner, B., differential volumeter for micro-respiration measurements, III, 566.
- and Schneider, C. L., differential growth in plant tissues. II. Modified auxin test of high sensitivity, III, 459. Relative activities of auxins, III, 459.
- See also Skoog, F.
- Thirsk, H. R., and Whitmore, E. J., electron diffraction study of surface reaction between nickel oxide and corundum, I, 266. Surface interaction between ferric and magnesium oxides, I, 370.
- Thivolle, L., and Sonntag, G., oxidation with dichromate and its micro-analytical applications. I. General principles. II. Micro-determination of ethyl alcohol, II, 240.
- Thode, H. G., vapour pressures, heats of vaporisation, and m.p. of ¹⁴NH₃ and ¹⁵NH₃, I, 202.
- Thom, C. See Steinberg, R. A.
- Thoma, H. See Jarisch, A.
- Thoma, O., isobolinine, a new alkaloid from *Lobelia inflata*, II, 293.
- Thomas, B. See Vellinger, E.
- Thomas, C. B., and Warthin, T. A., response of normal dogs and dogs with experimental hypertension to standard cold stimulus, III, 634.
- Thomas, C. C., and Miller, E. E., rotenone in treatment of scabies, III, 600.
- Thomas, C. L. See Egloff, G.
- Thomas, D. E., new form of Sauter X-ray goniometer, I, 330.
- Thomas, D. S., jun. See Alter, C. M.
- Thomas, E. See Baehr, G.
- Thomas, E. W., and Canizares, O., relapsing early acute arsenical erythema, III, 864.
- See also Canizares, O.
- Thomas, G. F. See Garrahan, J. P.
- Thomas, H. B., and Hill, R. T., testosterone propionate and male climacteric, III, 733.
- Thomas, H. E. See Callaghan, E., and Oserkowsky, J.
- Thomas, J., citric acid in muscle respiration, III, 196.
- Thomas, J. A., automatic sterile perfusion apparatus for large organs, III, 274. Vacuum or compressed gas auto-distributor for physiological or other use, III, 369.
- Thomas, J. C., and Robertson, W. M. F., Wassermann and Meinicke Klärungs reactions (original M.K.R. II and Ford Robertson-Colquhoun modification) in diagnosis of syphilis, III, 359.
- Thomas, J. E., maximal acidity of intestinal contents during digestion, III, 741.
- and Crider, J. O., inhibition of gastric motility associated with presence of products of protein hydrolysis in the upper small intestine, III, 132.
- See also Crider, J. O.
- Thomas, J. K. See Bell, R. P.
- Thomas, L. B., quantum yield in chloroacetic acid, I, 392.
- Thomas, L. C. See Roberts, E.
- Thomas, L. H. See Shaffer, W. H., and Whitcomb, S. E.
- Thomas, R. K. See Bennister, H. L.
- Thomas, R. M., sex hormone therapy in experimental peripheral gangrene, III, 583. Cellular reactions to lipid fractions of tubercle bacillus, III, 613.
- and Dessau, F. I., experimental tuberculosis in mice; cellular response to chemical fractions of tubercle bacillus, III, 454.
- Mylon, E., and Winternitz, M. C., myocardial lesions resulting from dietary deficiency, III, 564.
- Sparks, W. J., Frolich, P. K., Otto, M., and Mueller-Cunradi, M., preparation and structure of polybutenes of high mol. wt., II, 147.

- Thomas, R. M. See also Head, J. J.
 Thomas, R. P. See Matthews, E. D.
 Thomas, S. L. S. See Linstead, R. P.
 Thomas, T. B., islet tissue in pancreas of *Elasmobranchii*, III, 785.
 Thomas, T. L. See Bowden, S. T.
 Thomassen, J. See Uylert, I. E., and Waterman, L.
 Thomassen, L., X-ray investigation of the system $\text{Cr}_2\text{O}_3\text{-NiO}$, I, 322.
 Thompson, A. F., jun., and Baer, M., reaction of aldoximes with diazomethane, II, 347.
 and Watt, S. B., partial reduction of acetylenes to olefines by use of an iron catalyst, II, 362.
 Thompson, A. R., and Tombleson, J. B. L., neurological complications of serum therapy, III, 797.
 Thompson, E. See Hughson, W.
 Thompson, F. C. See Hargrave, J., and Walke, H.
 Thompson, F. K. See Friedman, L.
 Thompson, F. X. See Vernon, A. A.
 Thompson, H., and Bearg, P. A., behaviour examination of infants as aid to early diagnosis of central nervous system disease, III, 722.
 Thompson, H. W., spectra and molecular vibrations of glyoxal, I, 402.
 and Dupré, D. J., infra-red and Raman spectra of ethylene sulphide, I, 345.
 Linnett, J. W., and Wagstaffe, F. J., infra-red spectrum of zinc dimethyl, I, 346.
 and Skerrett, N. P., infra-red spectrum of methyl mercaptan, I, 345.
 Thompson, J. M. C. See Clow, A., and Robinson, (Sir) R.
 Thompson, K. W., Hale, T., and Whitcomb, B. B., abortifacient action of serum and urine from patients with cancer, III, 46.
 See also Eisenhardt, L., and Severinghaus, A. E.
 Thompson, L. D., Edwards, J. C., and Hoagland, C. L., treatment of lobar pneumonia, III, 757.
 See also Edwards, J. C.
 Thompson, M. de K., reaction between iron and water in absence of oxygen, I, 444.
 and Fairbanks, H. V., hydrogen anode, I, 442.
 and Sistare, G. H., jun., hydrogen and oxygen overvoltages of chromium-nickel alloys in 1-molar potassium hydroxide, I, 324.
 Thompson, N., order-disorder transformation in the alloy Ni_3Mn , I, 251.
 Thompson, R. See Gallardo, E.
 Thompson, R. H. See Cope, O.
 Thompson, S. Y. See Henry, K. M.
 Thompson, V. See Gross, E. G.
 Thompson, W. H. See Brown, G. D.
 Thompson, W. O., toxic goitre: present status of treatment, III, 726.
 and Heckel, N. J., clinical use of male sex hormone, III, 647.
 Thompson, W. P., hæmolytic jaundice, III, 788.
 Thompson, Y. C. See Scarborough, H.
 Thoms, H., and Godfried, M. S., interrelationships between foetal weight, size of pelvic inlet, and material height, III, 279.
 See also Greulich, W. W.
 Thomsen, E., relation between corpus allatum and ovaries in adult flies (*Muscidæ*), III, 650.
 Thomsen, O., Pedersen-Bjergaard, K., and Anderson, I., action of small quantities of progesterone, III, 414.
 Thomson, A. M., Griffith, H. D., Mutch, J. R., Lubbock, D. M., Owen, E. C., and Logaras, G., diet in relation to health; dark adaptation as index of adequate vitamin-A intake. III. Relation of diet to dark adaptation, III, 116.
 Thomson, D. L. See Collip, J. B.
 Thomson, D. M. See Greene, R. R.
 Thomson, G. M. See Batchelor, R. C. L.
 Thomson, G. P. See Fertel, G. E. F.
 Thomson, G. W. See Calingaert, G.
 Thomson, K. J., Reid, D. E., and Cohen, M. E., circulation in pregnancy. IV. Venous pressure observations in normal pregnant women, in pregnant women with compensated and decompensated heart disease, and in pregnancy toxæmias, III, 294.
 Thomson, R. B. C., chronic gas poisoning, III, 604.
 Thomson, W. See Fraser, A. H. H.
 Thomson, W. A. R., effect of potassium on heart in man, III, 14.
 See also Parkinson, J., and Wesselow, O. L. V. S.
 Thor, C. J. B., and Smith, Charles Linton, prefilling period of fruit development in the pecan, III, 80.
 See also Smith, Charles Linton.
 Thordarson, O., hyperprothrombinæmia during pregnancy, III, 470.
 Thordarson, U., self-experimentation in artificially produced night-blindness, III, 399.
 Thorn, G. W., and Firor, W. M., deoxycorticosterone acetate in Addison's disease, III, 896.
 Thornberry, H. H., and McKinney, H. H., purification of *Nicotiana* virus VI protein, III, 358.
 Thorner, J. E., alopecia totalis, III, 401.
 Thorner, M. W., myasthenia gravis and hyperthyroidism, III, 20.
 Thornhill, W. A., Swart, H. A., and Reel, C., sulphanilamide in staphylococcal septicæmia, III, 242.
 Thornton, H. G. See Chen, H. K.
 Thornton, J. J., effect of chronic cardiac venous occlusion on coronary arterial and cardiac venous hæmodynamics, III, 383.
 and Mautz, F. R., experimental methods for producing chronic, progressive, coronary arterial occlusion, III, 631.
 See also Gregg, D. E.
 Thornton, J. W., prostigmine and ephedrine in myasthenia gravis, III, 390.
 Thornton, M. H., Kraybill, H. R., and Mitchell, J. H., jun., sterol glucosides from expressed soya-bean oil, II, 365.
 Thornton, N. C., oxygen regulates dormancy of the potato, III, 82. Development of dormancy in lily bulbs, III, 364.
 Thornton, R. L., radioactive isotopes of zinc, I, 339.
 and Cork, J. M., multiple ejection of neutrons from excited nuclei, I, 338.
 Thornton, W. B. See Brown, W. H.
 Thornton, W. M., electric strength of gases, measured by corona discharge, I, 58.
 Thornwaite, C. W., atmospheric moisture in relation to ecological problems, III, 691.
 Thorogood, E. See Coombs, F. S.
 Thorp, C. E., starch iodide method of ozone analysis, I, 299.
 Thorp, F., jun. See Barr, C. G.
 Thorpe, W. H., pre-imaginal olfactory conditioning in insects, III, 112.
 Thorsness, E. T., aberrant pancreatic nodule arising on neck of human gall bladder, III, 834.
 Thorvaldson, T., and Johnson, L. R., selenium content of Saskatchewan wheat, III, 694.
 Thosar, V. B. See Shah, M. P.
 Throckmartin, C. L., and Sorum, C. H., pH change in gold sol formation, I, 161.
 Thuret, J., use of the nephelometer for serial determinations of small quantities of arsenic by Bougault's method, I, 83.
 Thuringer, J. M., mitotic index of palmar and plantar epidermis in response to stimulation, III, 555.
 Thyssen-Bornemisza, S. von, variation with temperature of the elastic properties of rock-salt, I, 152.
 Tiba, K. See Fujise, S.
 Tibbs, S. R., electron energy levels in sodium chloride, I, 59.
 Tichonova, E. E. See Petrov, A. D.
 Tichonova, G. N. See Petrov, A. D.
 Tichvinskaja, V. D., inheritance of chemical composition by hybrids of *Nicotiana tabacum* and *N. glauca*, III, 270.
 Tidrick, R. T., Joyce, F. T., and Smith, H. P., vitamin-K deficiency and prothrombin; effect of vitamin-K administration, III, 378.
 Tiede, E., and Villain, E., crystallo-chemical studies in spinel luminophors; system magnesium orthotitanate-manganese, I, 402.
 Tiedjens, V. A. See Wall, M. E.
 Tietz, E. See Müller, Eugen.
 Tietz, E. B., Dornheggen, H., and Goldman, D., blood-adrenaline levels during insulin shock treatment, III, 498.
 Tietze, E., and Bayer, O., sulphonic acids of pyrene and their derivatives, II, 271.
 Tiffany, E. J. See Rakieten, M. L.
 Tiffeneau, J. See Rathery, F.
 Tiffeneau, M., and Cahen, R., effect of variations in alkali reserve on propyl bromide anaesthesia, III, 252.
 Tiffin, M. E., Chandler, L. R., and Faber, H. K., localised absence of ganglion cells of myenteric plexus in congenital megacolon, III, 663.
 Tigert, W. D., Duncan, C. N., and Hight, A. J., erythrocyte morphology in experimental hæmolytic anæmia as induced by specific hæmolyisin, III, 788.
 Tigges, F. See Jacobi, J.
 Tikkanen, P. See Enkvist, T.
 Tilden, E. B., and Hudson, C. S., conversion of starch into crystalline dextrans by the action of a new type of amylase separated from cultures of *Aerobacillus macerans*, III, 72.
 Tilden, I. L. See Gotshalk, H. C.
 Tiling, W. See Kottgen, H. U.
 Tiltscheev, M. D., kinetics of cracking of hydrocarbons under pressure. II. Naphthenic hydrocarbons. III. Aromatic hydrocarbons. IV. Cracking of olefines, diolefines, and cyclic unsaturated hydrocarbons, I, 29, 76. Unification of data on kinetics of cracking of hydrocarbons, I, 261.
 Tilleard, D. L., controlled flocculation, I, 411.
 Tillett, W. S., toxic effects of sulphonamide compounds, particularly sulphapyridine, III, 921.
 Tilley, C. E. See Johnston, R. W.
 Tillim, S. J., observations of insulin sensitivity, III, 732.

- Tillmanns, H. See Löhr, H.
- Timm, J. A., 5-alkylbarbituric acid-5-acetanilides. III. *p*-Ethoxy-derivatives, II, 25.
- Timmermans, J., polymorphic forms of organic compounds, I, 313.
- Timofeev, P. V., mechanism of secondary emission of electrons from composite surfaces, I, 88.
- Timofeev-Ressovski, N. W., and Zimmer, K. G., radiogenetics, III, 465.
- Timonin, M. I., interaction of higher plants and soil micro-organisms. I. Microbial population of rhizosphere of seedlings of cultivated plants, III, 872.
- Timoschavskaja, N. M., preparation of 2:5-dimethylpyrrole from corresponding monocarboxylic ester, II, 53.
- Tin, H. See Yamamoto, R.
- Tincker, M. A. H., and Unwin, C. H., root-forming substances used for propagation purposes, III, 460.
- Tindal, C. H. See Shankland, R. S.
- Ting, Y. C. See Feng, T. P.
- Tingey, A. H. See Richter, D.
- Tingstam, S. See Schlenk, F.
- Tinn, C. A., efficacy of local anaesthetics, III, 602, 925. Idiosyncrasy to local anaesthetics, III, 925.
- Tintea, H., ultra-violet absorption spectra of vapours of monohalogenated toluene derivatives. II, I, 93.
- and Pogăncănu, P., absorption spectra, I, 56.
- See also Pogăncănu, P.
- Tiollais, R., and Pédon, A., constant-temperature apparatus, I, 82.
- and Perdreau, H., determination of arsenic in organic arsenic compounds, II, 294.
- Tippett, N. See Nicklaus, C. E.
- Tipson, R. S., and Levene, P. A., structure of yeast ribonucleic acid, guanine-uridylic acid, II, 27.
- Tipton, S. R., effect of extracts of adrenal glands on respiration of isolated brain and liver slices, III, 410.
- Tischendorf, W., two German families with Pelger leucocytes, III, 7. Atypical anaemia, III, 182.
- Tischtschenko, D. V., aliphatic chloro-derivatives. XIV. Additive power of ethylenic linkings at quaternary carbon atoms, II, 33.
- See also Michailov, G. P.
- Tischtschenko, F. E., thermal study of Al-Ag alloys in the region of the β -phase, I, 20.
- Tisdall, F. F. See Branion, H. D., and Ham, A. W.
- Tiselius, A., and Eriksson-Quensel, I. B., peptic digestion of ovalbumin, III, 72.
- and Horstfall, F. L., *jun.*, electrophoretic technique. I. Electrophoresis of haemocyanins, I, 255.
- and Svensson, H., influence of electrolyte concentration on electrophoretic mobility of egg-albumin, I, 115.
- Tishler, M., Fieser, L. F., and Sampson, W. L., vitamin-K activity of naphthols and ketotetrahydronaphthalenes, III, 820.
- Fieser, L. F., and Wendler, N. L., nature of the by-product in the synthesis of vitamin-K₁, II, 351.
- See also Fieser, L. F.
- Tislowitz, R., toxic action of large doses of diethylstilboestrol on blood in dogs, III, 129. Action of oestrogens in inducing mitoses in prostate and seminal vesicle of mice as determined by colchicine technique, III, 583.
- Titani, T., and Goto, K., substitution reactions of oxygen atoms between glucose, fructose, and water, II, 68.
- and Nakata, S., catalytic oxidation of sulphur dioxide by heavy oxygen on the surface of spongy platinum, I, 366.
- and Yoshida, Tohiti, chain polymerisation of styrene in solution; polymerisation of styrene in heavy alcohol, I, 259.
- Tithe, L. L., and Brown, J. P., familial macular degeneration, III, 844.
- Titeca, S., absorption of heavy corpuscles, I, 400.
- Titov, A. I., chemical properties of acetates; solubility of sulphanilic acid in acetic acid in presence of acetates, I, 21.
- Titrud, L. A. See Green, R. G.
- Tittensor, E. See McGookin, A.
- Titus, A. C., and Olsen, J. S., empirical mercurimetric method for [determination of] zinc, I, 268.
- See also Baxter, G. P.
- Titus, H. W. See Burrows, W. H.
- Titus, R. S. See White, P.
- Tixier, G., and Beck, J., antagonism *in vitro* of the oxytocic hormone of the posterior pituitary and adrenaline; determination of minute amounts of adrenaline, III, 641.
- Tjhan, G. I. See Radsma, W.
- Tjiu, D., action of sulphapyridine in lobar pneumonia of adults, III, 244.
- To, S., and Ko, B., grasping power, contraction power of muscoli dorsi, and the ergogram of opium addicts, III, 928.
- Toajari, E., structural differences in bones of cattle, III, 371.
- Tobin, C. E., influence of adrenal destruction on prenatal development of albino rat, III, 3. Survival of litters from adrenalectomised rats treated with cortico-adrenal substitutes, III, 125.
- Tobin, (Miss) E. See Reimer, (Miss) M.
- Tobin, H. A. See Duncan, C. W.
- Tobitani, T., action of camphor on blood-sugar, III, 155.
- Tobler, W., vitamin-C requirements of children, III, 52.
- Tocantins, L., no platelet-destroying action in extracts of spleen and urine of patients with chronic thrombopenic purpura, III, 288. Experimental hypoprothrombinæmia with anti-prothrombin serum, III, 706.
- See also Duncan, G. G.
- Todd, A. R. See Blount, B. K., Charles, A. F., El Sadr, M. M., Ghosh, R., Hems, B. A., Jacob, (Miss) A., and Madinaveitia, J.
- Todd, D., Harris, G. H., and Noller, C. R., saponins and sapogenins. XV. Relationship of echinocystic and oleanolic acids, II, 311.
- See also Campbell, W. P.
- Todd, E. W., Coburn, A. F., and Hill, A. B., antistreptolysin S titres in rheumatic fever, III, 266.
- Todd, F., benzene-toluene isopiestic liquid-vapour equilibrium data, I, 164.
- Todd, T. W. See Painter, J. M.
- Todd, W. M. See Crowley, G. P., and Robinson, (Sir) R.
- Todes, O. M., and Melenteev, P. V., theory of thermal explosion. II. Thermal explosion for unimolecular reactions, I, 28.
- Todhunter, E. N., and Fatzer, A. S., comparison of utilisation by college women of equivalent amounts of ascorbic acid in red raspberries and in crystalline form, III, 514.
- Todhunter, E. N., and Robbins, R. C., amount of ascorbic acid required to maintain tissue saturation in normal adults, III, 514.
- Robbins, R. C., Ivey, G., and Brewer, W., comparison of utilisation by guinea-pigs of equivalent amounts of ascorbic acid in lemon juice and in crystalline form, III, 514.
- Toegel, immediate treatment of gonorrhoea with uleron and albucid, III, 245.
- Toennies, G., sulphonium reactions of methionine and their metabolic significance, III, 327.
- See also Kolb, J. J., and Reimann, S. P.
- Toennies, J. F., conditioning of afferent impulses by reflex discharges over the dorsal roots, III, 297.
- Tönsberg, E., and Vegard, L., origin of the yellow line in twilight and the night sky luminescence, I, 275.
- Töpker, H. See Vogel, R.
- Toepsch, H., temperature measurements of working horses, III, 445.
- Török, T. See Bodnár, J.
- Toettcher, F. C. See Long, E. A.
- Tokaji, E., and Gerard, R. W., avitaminosis-B₁ and pigeon brain potentials, III, 51.
- Tokoro, Y., induction of sarcomata in white rats with concentrated salt solutions, III, 669.
- Tol, T. See Was, D. A.
- Tolansky, S., hyperfine structure in the spark spectrum of iodine, I, 50.
- and Trivedi, S. A., hyperfine structure in spectrum of bromine [Br I], I, 335.
- Tolksdorf, S., and Jensen, Hans, mechanism of pituitary gonadotropic antagonism, III, 402.
- See also Evans, H. M., and Jensen, H.
- Tollman, J. P., Drummond, D. H., McIntyre, A. R., and Bisgard, J. D., tissue metabolism and phosphatase activity in early callus, III, 698.
- MacQuiddy, E. L., and La Towsky, L. W., acute poisoning in animals after intraperitoneal and intratracheal administration of dusts, III, 257.
- See also Drummond, D. H., and MacQuiddy, E. L.
- Tomaschov, N. D., mechanism of corrosion of copper in electrolysis, I, 33. Change in the rate of solution of copper during anodic and cathodic polarisations; difference effect; protective effect, I, 78.
- Tombleson, J. B. L. See Thompson, A. R.
- Tomboulou, D. H., and Bacher, R. F., nuclear electric quadrupole moment for ¹²³Sb, I, 335.
- Tomecko, J. W. See Basterfield, S.
- Tomenius, J. See Myhrman, G.
- Tomescu, I. See Zamfir, D.
- Tomíček, O., and Peták, K., determination of halogens in organic material, II, 31.
- Tominaga, A., photochemical dehydrogenation of 7-dehydrocholestene, II, 74.
- Tominaga, H., Adzumi, H., and Isobe, T., viscosity effect on the rate of dissolution of calcium carbonate in hydrochloric acid, I, 31.
- Tomita, C., excretion of *m*-acetamido-*p*-hydroxyphenylarsinic acid in urine and bile, III, 155. Poisonous action of *m*-acetamido-*p*-hydroxyphenylarsinic acid and its absorption by gut, III, 155.
- and Hojô, T., occurrence of arsenic in brain after administration of *p*-hydroxy-*m*-acetamidophenylarsinic acid, III, 65.

- Tomita, M., synthesis of derivatives of diphenylene dioxide. XV. α -Keto- (or hydroxy)- β -(or γ -morpholyalkylidiphenylene dioxides, II, 231. Menispermaceae alkaloids (formerly, alkaloids of *Sinomenium* and *Cocculus*). L. Alkaloids of *Stephania sasakii*, Hayata. I., II, 238.
- Tomita, T., castration and ultra-violet irradiation in hepatoma production, III, 669.
- Tomme, M., and Loria, K., gaseous, dry matter, and energy exchange in fasting rabbits, III, 325.
- and Missiutkina, M., influence of temperature on gas and dry matter exchange, III, 325.
- Tomonaga, S., mesotron-electron collisions, I, 385.
- and Araki, G., effect of the nuclear Coulomb field on the capture of slow mesons, I, 343.
- Tompkins, C. A. See Howard, P. J.
- Tompkins, C. F., activated adsorption of gases by heteropolar crystals, I, 21.
- Tompkins, F. C., sorption of ammonia on sodium chloride crystals, I, 68.
- See also Alexander, E. A.
- Tompsett, S. L., absorption, mobilisation, and excretion of lead, III, 241.
- Plasma-iron, III, 703. Absorption of iron and copper from alimentary tract, III, 703.
- Toms, B. A., hydration of anilides of normal fatty acids, I, 360. Binding of water by stearanilide, I, 410. Hydration of stearanilide, II, 125.
- Tomsicek, W. J., and Carney, J. J., revised procedure for qualitative analysis of group III cations, I, 174.
- Tondo, M., and Di Giulio, T., Farabouf's triangle, III, 277.
- See also Di Giulio, T.
- Tongiorgi, V. See Cocconi, G.
- Toniolo, G., action of X-rays on the Galliera sarcoma of the rat, III, 424.
- Tonks, L., theoretical isotherms for adsorption on a square lattice, I, 355.
- Tono, P. See Bolcato, V.
- Tonosaki, K., reduction of molybdenum dioxide by hydrogen, I, 322. Reduction of molybdenum dioxide by deuterium, I, 323.
- Tonutti, E., ascorbic acid in the cell and its importance for cell activity, III, 234.
- Tooke, F. T., and Nicholls, J. V. V., changes in fundus oculi following splanchnectomy for malignant hypertension, III, 192.
- Tooke, T. B., jun., Power, M. H., and Kepler, E. J., tolerance of patients with Addison's disease to potassium, III, 807.
- Tool, A. Q., heat effects of tridymite inversions, I, 388.
- Toomey, J. A., infection and immunity virus diseases: general considerations, III, 77. Second attacks of experimental poliomyelitis in *Macacus rhesus* monkeys. III. Immunity or lack of immunity to the Philadelphia 1932 strain of virus, III, 171. Attempts to isolate poliomyelitis virus from stools of human beings and experimental animal, III, 267.
- Reichle, H. S., and Takacs, W. S., effects on monkeys of sulphapyridine in doses comparable with those used for infants, III, 822.
- and Weaver, H. M., experimental paralysis in monkeys completely recovered from poliomyelitis produced by cultures of material from patients with measles, III, 267.
- Topley, B. See Lunt, R. W.
- Topoljanskaja, S. I. See Sergienko, F. E.
- Toporescu, E., mutual polarity of silver and nickel in aqueous potassium iodide, I, 258.
- Toporetz, A. S., luminescence spectra of phosphors activated with silver, I, 282.
- Topp, N. E., and Davies, C. W., extent of dissociation of salts in water. IX. Calcium and barium salts of dicarboxylic acids, I, 163.
- Topper, A., and Rubin, H. S., basal metabolism of tuberculous children. V. Tuberculous pleurisy, III, 635.
- and Shore, J., basal metabolism of tuberculous children. II. Afebrile primary pulmonary tuberculosis, III, 147.
- See also Ginandes, G. J.
- Topper, Y. J. See Abt, A. F.
- Topping, N. H., preservation of infectious agents of rickettsioses, III, 690.
- See also Fraser, H. F.
- Topping, M. C., and Knoefel, A. F., riboflavin in pemphigus vulgaris, III, 818.
- Toral, (Miss) T. See Moles, E.
- Torda, C., acetylcholine, prostigmine, potassium, fatigue, and crossed extensor reflex (toad), III, 297.
- Torniainen, M. See Virtanen, A. I.
- Toropov, A., viscosimeter for volatile liquids, I, 274.
- Toropov, A. P. See Udovenko, V. V.
- Toropov, N. A., and Schischakov, N. A., system sodium ferrite-sodium aluminate, I, 26.
- and Stukalova, M. M., interchange of bases in crystals of β -alumina, I, 126.
- Torrance, C. C., relation of adrenal haemorrhage to loss of vitamin-C in experimental diphtherial intoxication, III, 125. Diphtherial intoxication and vitamin-C content of the adrenals of guinea-pigs, III, 324.
- Torres, O. R. See Pierce, W. C.
- Torrini, A. See Moro, M.
- Torrioli, M., and Allara, E., effect of testicular lipin extracts on reticulohistocytic system, III, 33.
- and Robotti, T., effect of lipin extracts of spleen and testes on mesenchymal response in experimental tuberculosis in guinea-pigs, III, 420.
- Torrisi, D., effect of lecithin and cholesterol on milk secretion and composition, III, 809.
- Torski, D. E. See Golovati, R. N.
- Tortone, J., Chattas, A., Myers, J. A., Stewart, C. A., and Streukens, T., tuberculosis in children less than 6 years of age, III, 170.
- Tosatti, E., biological experimentation with wave-lengths of less than one metre; apparatus; neuro-muscular stimulation, III, 69. Respiratory function of direct and crossed descending fibres in anterior column of spinal cord at the thoracic level. I. Direct fibres. II. Crossed fibres, III, 387.
- Toscani, V. See Milhorat, A. T.
- Tosimitu, T. See Ishikawa, S.
- Tosti, V. G. See Shapiro, B.
- Toth, D. See Fischer, R.
- Tóth, G., and Zechmeister, L., chitin content of mandible of snail (*Helix pomatia*), III, 420.
- See also Zechmeister, L.
- Toth, L. A., renal and vascular responses to adrenaline injections in glomerular and aglomerular fish, III, 30.
- Totire-Ippoliti, P., and Gessi, U., simultaneous immunisation and treatment with quinine, III, 438.
- Tottingham, W. E., determination of mineral elements in plant tissue, III, 944.
- Toubes, B., and Rollefson, G. K., nature of ions emitted by heated filaments and salts, I, 336.
- Touchard, T. See Gley, P.
- Toumanoff, C. See Mesnard, J.
- Tourangeau, F. J., industrial hygiene in Province of Quebec, III, 256.
- Tournade, A., Fourment, P., Roques, H., and Chardon, G., pharmacodynamical study of red squills, III, 338.
- Joltrain, E., and Chardon, G., technique for functionally excluding sinus nerves in dog [effect on circulation], III, 292.
- Toussaint, C. See Florin, M.
- Toussaint, H., use of blood transfusion in medicine, III, 186.
- Toussaint, N. F., and Hennion, G. F., alkylation of benzene with alcohols, boron fluoride, and assistants, II, 270.
- Touw, J. F., and Graafland, C. A., case of aleukemic lymphatic leukaemia with specific localisations and symptomatic pernicious anaemia, III, 91.
- Tovbin, M., and Feldman, M., electrochemical method of determining iodine, I, 267.
- Tovell, R. M. See Ruth, H. S.
- Tower, S. See Westbrook, W. H. L.
- Town, B. W., glutamic acid of proteins [relation to malignancy], III, 507.
- Towne, L. E. See Nathanson, I. T.
- Townend, D. T. A. See McCormac, M.
- Townes, C. H., and Smythe, W. R., spin of ^{13}C , I, 87.
- Townsend, F. E., and Cade, G. N., jun., separation of cadmium from zinc using granular aluminium, I, 268.
- Townsend, G. F., and Lucas, C. C., chemical examination of lipin fraction of royal jelly, III, 746. Chemical nature of royal jelly, III, 911.
- Townsend, R. F. See Cade, S.
- Townsend, S. R., and Braunstein, A. L., hyperchromic macrocytic anaemia in association with Hodgkin's disease, III, 182.
- and Mills, E. S., use of vitamin-K and bile salts in prevention and control of haemorrhagic diathesis in obstructive jaundice, III, 185. Haemorrhagic tendency associated with prothrombin deficiency and its treatment with vitamin-K and bile, III, 628.
- Toxopeus, M. A. B., distribution of iodine in organism normally and under influence of hormones, III, 407.
- Toyama, O. See Kondo, Yukio.
- Trabacchi, G. C. See Amaldi, E.
- Trachsler, W., use of zinc-protamine-insulin in juvenile diabetics, III, 209.
- Trachtenberg, D. M. See Schemjakin, M. M.
- Tracy, R. L., comparative metabolism of R and S variants of *Lactobacillus plantarum* (Orla-Jensen), III, 934.
- Trager, W. See Subbarow, Y.
- Tragerman, L. J., and Goto, J. M., fatal reactions to administration of sulphonamide drugs, III, 921.
- See also Halliday, N.
- Traill, J. G., geology and development of Mill Close Mine, Derbyshire, I, 181.
- Trautenberg, S. See Schneidewind, Z.
- Transue, L. F. See Washburn, E. R.
- Trant, E. F. See Fantus, B.

- Trask, J. D. See Kennard, M. A.
- Trasoff, A., treatment of benign prostatic hypertrophy with testosterone propionate, III, 647.
- Traub, E. F., and Emmet, R., blood-iodine of patients with acne vulgaris, III, 473.
- Trautmann, A., and Asher, T., digestion and resorption of carbohydrates in the large intestine of ruminants, III, 510.
- Travagli, G., volumetric titrations with potassium bromate, I, 269. Reaction of sodium nitroprusside with hydantoin, II, 55. Differentiation of phenols. I. Metallic derivatives of nitrosophenols, II, 166.
- Travell, J., influence of p_{H} on absorption of alkaloids from the stomach, III, 680.
- Travers, A., and Aubry, J., electrolytic potential of Raney nickel, I, 219.
- Travers, T. A. B., origin of abnormal retinal correspondence, III, 398.
- Travia, L. See Rossi, A.
- Treadwell, C. R. See Tucker, H. F.
- Treadwell, W. D., and Cohen, A., decomposition potential of carnallite melts, I, 75.
- and Zürcher, M., rapid determination of halogen in hydrocarbons substituted by chlorine and fluorine, II, 31.
- Trebushenko, P. D., breeding red-fruited and red-fleshed varieties of apple; inheritance of anthocyanin coloration in apple tree, III, 82.
- Treffers, H. P., viscosity-fluidity relations of proteins, I, 358.
- See also Heidelberger, M.
- Tregidga, A. C., dielectric constant of water vapour at a frequency of 42 megacycles, I, 197.
- Treibs, W., catalytic oxidation of straight-chain olefines with hydrogen peroxide, II, 33. Oxidation of cyclic compounds by hydrogen peroxide catalysed by pervanadic acid, II, 209.
- Trelease, H. M. See Trelease, S. F.
- Trelease, S. F., and Selsam, M. E., influence of calcium and magnesium on growth of *Chlorella*, III, 457.
- and Trelease, H. M., physiological differentiation in *Astragalus* with reference to selenium, III, 458.
- Tremble, G. E., technique for taking movies of larynx, III, 206.
- Trendelenburg, F., sector process for photographing electron interferences, I, 175.
- Trendelenburg, W., most suitable source for anomalouscope and dividing line between normals and protanomalous subjects, III, 399.
- Tron, J. F. See Scott, E. W.
- Treptow, A. W. See Nix, F. C.
- Tressler, D. K. See Zimmerman, W. I.
- Trethowie, E. R. See Kellaway, C. H.
- Trevor, F. C. See Buxton, L. H.
- Tria, E., ascorbic acid and activity of pepsin, III, 145. Effect of fatty acids on peptic activity, III, 347.
- Trice, M. F., pyrophylite dust—its effect and control, III, 930.
- See also Easom, H. F.
- Trifănescu, T. See Chaborski, G. L.
- Trifonov, N. A., surface tension isotherm of binary liquid systems, I, 409.
- and Alexandrov, G. K., application of surface tension to physicochemical analysis of rational systems, I, 409.
- and Chalezova, A. T., surface tension of rational systems aniline-allylthiocarbimide and acetic anhydride-water, in connexion with their other properties, I, 409.
- Trifonov, N. A., and Mertzlin, R. V., surface tension of irrational binary liquid systems, I, 409.
- Trikojus, V. M., and Ellis, W. J., factors influencing thyroid involution in guinea-pigs after prolonged administration of thyrotropic hormone; determination of adrenal ascorbic acid, III, 404.
- and White, D. E., synthesis of myristicin, II, 42.
- Trillat, J. J., optical demonstration of the diffraction of electrons, I, 62. Studying adsorption and its applications, I, 208.
- Trimble, F. See Dunlop, A. P.
- Trimble, H. C. See Weatherford, H. L.
- Trimble, H. M., assembling thermocouples, I, 175.
- and Richardson, E. L., equilibrium in an esterification reaction with perchloric acid as catalyst, I, 321.
- Trimby, R. H., and Nicholson, H. C., nature of respiratory waves in arterial blood pressure, III, 792.
- See also Nicholson, H. C.
- Tripod, J., sympathomimetic action of local anaesthetics, III, 248.
- See also Chakravarti, M.
- Tripp, G. E. See Billman, J. H.
- Trister, S. M. See Pacsu, E.
- Tristram, G. R., proteins of *Hevea brasiliensis*. I. Product from dried latex, III, 462.
- See also Chibnall, A. C.
- Tritsch, J. E., comparative effectiveness of two antiseptics in preventing infection following delivery, III, 61.
- Trivedi, S. A. See Tolansky, S.
- Troesch, E. E., and Norris, E. R., micro-blood-esterase determination applied to studies of rats bearing adenocarcinoma, III, 424.
- Trofimov, A. V., relation between chlorinity and density of Caspian sea water, I, 44. Oxidising activity and p_{H} of brown sediments of the Barentz Sea, I, 44.
- Troiano, A. R. See Greninger, A. B.
- Troisier, J., Bariéty, M., and Kohler, D., effect of sympatholytics on intra-pleural pressure, III, 249. Parasympathomimetic drugs and intrapleural pressure, III, 566.
- Tronova, V. A. See Juriev, J. K.
- Troschtschenko, A. T., phenylation of oxacarboxyanines, II, 193.
- Trotter, M., level of termination of popliteal artery in white and negro, III, 781.
- Troup, A. G., and White, R. M., sulphapyridine in pemphigus neonatorum, III, 245.
- Trowell, H. C., infantile pellagra, III, 514.
- Trowell, O. A., and Willmer, E. N., effects of tissue extracts on growth of periosteal fibroblasts, III, 88.
- Trslowitz, R., colchicine test as method for determining time of onset and duration of action of male active substances, III, 216.
- Truax, F. L., equality of chloride space and extracellular space of rat liver, III, 134.
- See also Murlin, J. R.
- Truex, R. C., alterations in Gasserian ganglion cells and their association with senescence in man, III, 797.
- Truka-Tuzson, J., blood-lactic acid and external temperature, III, 792.
- Trump, B., secondary action of mesotron radiation, I, 5.
- Trupp, M. S., and Goodrich, F. J., [anthelmintic value of] *Athyrium filix-femina*, III, 759.
- Trurnit, H. J., variations in energy metabolism during cell division; temperature measurement on single living cells, III, 325.
- Trusler, H. M., Egbert, H. L., and Williams, H. S., blood chemistry in burn shock, III, 285.
- Trussell, R. E. See Swan, K. C.
- Truszkowski, R., and Duszynska, J., protection of mice against potassium poisoning by corticoadrenal hormones, III, 728.
- Tsai, C., Lee, J. S., and Wu, C. H., rôle of splenic action in altering erythrocytic fragility, III, 627.
- See also Wu, C. H.
- Tsamboulas, N., specific dynamic action of foodstuffs, III, 237.
- Tsang, Y., supra- and post-optic commissures in rat brain, III, 719.
- Tsao, C. P. See Kung, L. C.
- Tsao, Y. F., McCracken, M. E., Chen, J., Kuo, P. T., and Dale, C. L., renal complications in sulphapyridine therapy, III, 247.
- Tschagovetz, R. V. See Scheinkman, E. A.
- Tschalenko, A. I., heat of combustion of benzophenone, I, 217.
- Tschalichjan, V. S. See Aldoschin, T. D.
- Tschalov, N. V., and Scholima, M. A., equilibrium between the liquid and vapour phases of dilute solutions of methyl alcohol, I, 74.
- Tschelincev, V. V., and Kuznetsov, V. I., condensation of furan derivatives. XII. Polyenic ketones (aliphatic and furanic) and their condensation, II, 186.
- and Kuznetsova, G. I., condensation of furan derivatives. XI. Dienic ketones (aliphatic and furanic) and their condensation, II, 186.
- Tschelischtscheva, A. G. See Nikolaev, A. V.
- Tschepelevetzki, M. L., periods of latent crystallisation and equation for rate of formation of crystal nuclei, I, 167.
- Tschepinoga, O. P., measurement of respiration of animal tissues by Warburg's method, III, 56. Dehydrogenases of trained and fatigued muscle tissues. I. Succinic dehydrogenase. II. α -Glycerophosphate dehydrogenase, III, 567.
- Tscherkasova, E. M. See Melnikov, N. N.
- Tscherkasova, L. See Mereshinski, M.
- Tschermak-Sevsnegg, A., functional configuration of retina, III, 491.
- Tscherne, E., action of oestradiol propionate on growth of hair, III, 307.
- Tschernevskaja, C., effect of exercise, training, and fatigue on hexose phosphate content of brain, III, 572.
- Tscherniaev, I. I., quadrivalent platinum triamines, I, 267. Quadrivalent platinum tetramine. I, I, 267.
- Tscherniavskaja, Z. P. See Sergienko, F. E.
- Tschernischev, A. S., characterisation of opianic acid, II, 46.
- Tschernjachivski, A., modification of Cajal's silver impregnation of peripheral nerves, III, 467.
- Tschernobaev, D. O., and Shivotovskii, A. G., equilibrium coefficients of reactions in the gaseous phase, I, 25.
- Tschernojarova, A. A., action of sulphuric acid on petroselic acid, II, 336.
- Tschernova, N. G., and Michailov, B. M., synthesis of polycyclic compounds. I. 1':2':3':4'-Tetrahydro-1:2-benz-anthrone-9, II, 179.
- See also Michailov, B. M.

- Tschertsches, C. A., refraction of periodic precipitates of silver dichromate in stretched gelatin, I, 440.
- Tschetter, D. See Brunschwig, A.
- Tschilikina, E. See Medvedev, S.
- Tschilow, K., chronic progressive thyrotoxic polyarthritides, III, 122.
- Tschinaeva, A. D., Ushakov, M. I., and Martshchewski, A. T., preparation of 17-methyltestosterone from dehydroandrosterone, II, 180.
- Tschirkov, I. N., mineralogy of Monche-Tundra, I, 180.
- Tschirkov, S. K., distribution of bromine between crystals and solution of potassium chloride and bromide, I, 251.
- Tschirvinski, P. N., microscopical investigation of podzol from the town Kirovsk, I, 334.
- Tschuchrov, F. V., weathering of jarosites, I, 304.
- Tschufarov, G. See Bujnov, M.
- Tschuik, V. T., and Voinar, A. O., titanium content of animals, III, 504.
- Tschuksanova, A. A., formation of naphthalene-1:3-disulphonic acid under conditions of direct sulphonation of naphthalene, II, 270.
- Tschumanov, S. M., and Axelrod, M. B., colorimetric determination of carbon monoxide, I, 268.
- Tseng, T. P., Feng, S. K., Cheng, C., and Band, W., dissociation treatment of condensing systems. III. Properties of saturated vapours of H_2O , NH_3 , $MeCl$, and CO_2 , I, 105.
- Tsuchida, R., Kobayashi, Masahisa, and Kuroya, H., extended co-ordination theory of valency. IV. Configuration of compounds of transition elements, I, 149.
- Tsuda, K., Itikawa, Z., and So, D., syntheses of heterocyclic derivatives of sulphanilamide, II, 107.
- and Suzuki, Kohei, chemotherapeutic investigations of heterocyclic derivative of sulphanilamide, III, 521.
- Tsuji, K., myasthenia gravis; relation to thyroid gland, III, 480. New type of pluriglandular insufficiency, III, 493. Function and therapeutic use of adrenal cortex, III, 579.
- Tsujimoto, Magosaburo, kikyo root. X. Constitution of platycodigenin; properties of double linking and oxygen atoms of platycodigenin, II, 352.
- Tsujimoto, Mitsumaru, bamboo-leaf waxes. I. Leaf wax of "nemagaridaké," III, 461.
- and Koyanagi, H., liver oils of terrestrial animals, III, 417.
- Tsukamoto, T. See Marker, R. E.
- Tsurugi, J. See Kimura, W.
- Tsurumi, M. See Mayeda, S.
- Tsusaki, T., history of anatomy in Japan during the Tokugawa period; Kawaguti's work, III, 834.
- Tsutulopulos, G., and Leutze, E., treatment of carcinoma transplants with implantation or extracts of normal tissues, III, 316.
- Tsutsumi, S., hydrogenation of cyclohexene with copper catalysts, I, 33. Differences between the catalytic actions of cobalt, palladium, and platinum catalysts, I, 33.
- Tsuzuki, Y., optical activity and chemical structure in tartaric acid. X. Influence of substituent and solvent effect, II, 203.
- and Kimura, Y., formation of boro-diol complexes, II, 152.
- Tucker, H. F., Treadwell, C. R., and Eckstein, H. C., effect of supplementary cystine and methionine on production of fatty livers by rats on high-fat diets containing casein or edestin, III, 821.
- Tucker, I. W. See Matlack, M. B.
- Tucker, S. H. See Dunlop, (Miss) H. G.
- Tuckett, R. F. See Melville, H. W.
- Tudor, C., velocity of negative ions of halogen salts, I, 51.
- Tudoranu, G., Dimitriu, C. C., and Filipescu, M., influence of gastric absorption of substances on gastric motility, III, 741.
- Dimitriu, C. C., and Piram, S., effect of gastric absorption of eupeptic substances on gastric motility in man, III, 132.
- Dimitriu, C. C., Tanasoca, T., and Petre, G., effect of substances in duodenum on gastric motility, III, 414.
- Türk, E., action of eumydrin in pylorospasm, III, 219. Obesity and leanness in children, III, 238.
- Tuoy, G. A. P. See Barrett, P. A.
- Tukamoto, M., fate of 3:6-diketo- and β -3-hydroxy-6-ketoallocholan acid in the toad, III, 755.
- Tulane, V. J. See Barnes, R. P.
- Tullar, B. F. See Marker, R. E.
- Tullio, P., acoustic stimulation of semi-circular canals, III, 119.
- Tulsky, A. S. See Lackner, J. E.
- Tunbridge, R. E., and Allibone, E. C., intravenous dextrose tolerance test, III, 433.
- T'ung, T., and Hsu, C. L., dissociation of pneumococcus by radon irradiation, III, 771.
- and Yeh-Tung, Y. F., polarity of ciliary action in anuran embryos, III, 623.
- See also Hsu, C., and Wong, S. C.
- Tunoda, Y. See Ochiai, E.
- Tuohy, E. B. See Allen, E. V.
- Turck, J. A. V., anomalous Friedel-Crafts reactions, II, 257.
- Tureen, L. L., lesions of fundus associated with brain hemorrhage, III, 490.
- Turell, R., Buda, A. M., and Marino, A. W. M., treatment of pruritus ani by tattooing with mercury sulphide, III, 526.
- and Marino, A. W. M., value of sedimentation time in suppurations of ano-rectal tissues, III, 557.
- Turkevich, A., and Beach, J. Y., internal rotation in $\alpha\beta$ -trichloroethane, I, 13.
- and Smyth, C. P., molecular rotation and polymorphism in methylchloromethanes, I, 433.
- Turkevich, J. See Woodman, J. F.
- Turley, L. A., and Dougherty, T. F., relation of lymphocytes to virulence of pneumococci types III and VII, III, 557.
- Relation of lymphocytes to activity of *Mycobacterium tuberculosis*, III, 628.
- Turlur, J. See Lespagnol, A.
- Turnbull, F., chordotomy for thalamic pain, III, 111. Dehydration and lumbar puncture in treatment of cranial injuries, III, 202.
- Turnbull, G. C., and Sagi, J. H., bleeding peptic ulcer, III, 36.
- Turnbull, L. G. See Russell, H. W.
- Turnbull, W. G. See Schwartz, Leon.
- Turner, A. J. See Hunter, E. C. E.
- Turner, C., modification of sexual differentiation in genetic female mice by pre-natal administration of testosterone propionate, III, 811.
- Turner, C. D., and Burkhardt, W. L., andromimetic effect of oestrogen on clitoris of rat, III, 215.
- Haffen, R., and St. Amant, L., persistence of medullary tissue in homotransplanted adrenals, III, 125.
- Haffen, R., and Struett, H., effects of testosterone on sexual differentiation of female albino mice, III, 215.
- Turner, C. L., pseudo-amnion, pseudo-chorion, and pseudo-placenta in viviparous cyprinodont fishes, III, 86.
- Follicular pseudoplacenta and gut modifications in anablepid fishes, III, 783.
- Pseudoamnion, pseudochorion, and follicular pseudoplacenta in poeciliid fishes, III, 783.
- Turner, C. W., endocrinology of milk secretion, III, 659.
- and Cupps, P. T., effect of experimental conditions on thyrotropic hormone content of rat, III, 731.
- See also Bergman, A. J., Gomez, E. T., Holst, S., and Houchin, O. B.
- Turner, D. G. See Cocker, W.
- Turner, D. L. See Marker, R. E.
- Turner, E. E. See Jamison, M. M., and Mole, (Miss) J. D. C.
- Turner, F. C., effects of extracts of human urine on tumours in mice, III, 229.
- Turner, J. M. See Henderson, Y.
- Turner, J. W. A. See Greenfield, J. G.
- Turner, K. B., DeLamater, A., and Province, W. D., blood-iodine in health, in thyroid and cardio-renal disease and leukaemia, III, 560.
- See also Steiner, A.
- Turner, L. A., non-existence of transuranic elements, I, 142. Secondary neutrons from uranium, I, 187. Missing heavy nuclei, I, 307. Nuclear fission, I, 340. Regularities among the heavy nuclei, I, 384.
- Turner, O. See Gardner, W. J.
- Turner, P. B., protective antibodies in serum of syphilitic rabbits, III, 266.
- Turova-Pollak, M. B., and Koschelev, A. F., isomerisation of polymethylene hydrocarbons in presence of aluminium chloride. IV. Isomerisation of *n*-butylcyclopentane, II, 159.
- and Tarasova, G. A., isomerisation of polymethylene hydrocarbons in presence of aluminium chloride. V. Isomerisation of *n*-amylcyclopentane, II, 338.
- Turrell, F. M., relation of internal surface to intercellular space in foliage leaves, III, 944.
- Turunen, A., endometriosis externa, III, 905.
- Tuschak, N. See Nichita, G.
- Tuthill, E. See Smith, M. E.
- Tuthasi, K. See Kuwada, S.
- Tutte, W. T. See Price, W. C., and Sutherland, G. B. B. M.
- Tuttle, A. D. See McFarland, R. A.
- Tuttle, C. See Jones, L. A.
- Tuttle, L. W. See Lawrence, J. M.
- Tuttle, W. W., and Voltmer, E. J., factors affecting neuro-muscular tremors, III, 296.
- Tuve, M. A. See Heydenburg, N. P.
- Twaddle, P. H. See Jeffers, W. A.
- Tweedy, W. R., Templeton, R. D., Patras, M. C., and McJunkin, F. A., action of calciferol in the nephrectomised rat, III, 430.
- Twelmeyer, G. O. See Wade, W. H.
- Twenhofel, W. H., cost of soil in rock and time, I, 48.

- Twigg, G. H., and Rideal, E. K., chemisorption of olefines on nickel, I, 208.
- Twiss, D. See Farinholz, L. H.
- Twombly, G. H., breast cancer produced in male mice of C 57 (black) strain of Little, III, 854.
- Twomey, A. C., Twomey, S. J., and Williams, L. R., selenium and duck sickness, III, 527.
- Twomey, S. J. See Twomey, A. C.
- Twort, J. M., and Lyth, R., skin cancer due to handling coal tars used for preservation of fishing nets, III, 45. Correlation of pituitary and spleen in experimental and control mice, III, 401.
- Tyler, A., crystalline echinochrome and spirochrome: their failure to stimulate the respiration of eggs and of sperm of *Strongylocentrotus*, III, 373. Egg-agglutinin from sea-urchin eggs, III, 624.
- and Fox, S. W., sperm agglutination in keyhole limpet and sea-urchin, III, 644.
- Tyler, A. W. See Lawson, J. L.
- Tyler, C., calcium and phosphorus metabolism in relation to chemical structure of bone. I. Experiments with laying birds, III, 435.
- Tyler, D. B., effect of cooling on mechanism of insulin action, III, 209.
- Greeley, P. O., and Drury, D. R., dehydration and basal insulin requirement, III, 412.
- and Ziskind, E., relation between insulin dosage, duration and degree of hypoglycemia, and production of brain damage, III, 848.
- See also Ziskind, E.
- Tyler, S. A., zircon studies in the New Jersey Highlands, I, 304.
- Tyrray, E. See Späth, E.
- Tyson, G. N., jun., and Adams, S. C., configuration of some cupric, nickelous, and cobaltous complexes by means of magnetic measurements, I, 313.
- Tyson, L. See Aggeler, P. M.
- Tyson, R. M., care of foetus and newborn, III, 809.
- Tyukody, F. von. See Mansfeld, G.
- Tzukervanik, I. P., and Jermolenko, I. A., reaction of keten with alcohols, II, 35.
- and Tambovtzeva, N. D., alkylation of phenol and anisole by the Friedel-Crafts reaction, II, 42.
- U.
- Ubalini, I., and Siniramed, C., so-called artificial humic acids, II, 153.
- Ubbelohde, A. R., structure and thermal properties associated with some hydrogen bonds in crystals. III. Further examples of the isotope effect, I, 151. Electrolytic growth of ionic crystals, I, 354. Role of free radicals in mechanisms of gaseous explosions, I, 414.
- See also Knaggs, I. E., and Oldham, J. W. H.
- Uber, F. M., and Verbrugge, F., photochemistry and absorption spectroscopy of pyrimidine component of vitamin-B₁, III, 750.
- See also Landen, E. W.
- Ubisch, L. von, development of ascidian larvae after early removal of presumptive germinal areas, III, 623.
- Uchikura, K., variability of diphtheria toxin. I. Cultural characteristics of different types of diphtheria bacilli in relation to their toxin-neutralisation with standard serum, III, 263.
- and Tei, H. S., differentiation of diphtheria bacillus types with Clauber's new medium, III, 263.
- Uchino, T., proteases. II. Proteolysis by pepsin, III, 932.
- Uddströmer, M., vitamin-A and respiratory tract infections, III, 231.
- Udovenko, V. V., viscosity in the systems ketones-organic acids. II. and III, I, 65.
- and Airapetova, R. P., viscosity in the systems ketones-organic acids. IV, I, 204.
- Sitschkova, E. V., and Toropov, A. P., surface tension of systems ketones-organic acids, I, 209.
- and Toropov, A. P., viscosity in the ternary systems: phenol-benzene-aniline, -dimethylaniline, and -diethylaniline, I, 290.
- and Usanovitch, M. I., cryoscopic study of the systems phenol-aniline, -dimethylaniline, and -diethylaniline, I, 290.
- and Vitjaeva, S. I., viscosity in the systems ketones-organic acids. V., I, 204.
- See also Usanovitch, M. I.
- Ueberwasser, H. See Erlenmeyer, H.
- Ueda, H. See Sasaki, T.
- Uehara, Y., luminescent materials. I. Theory of the zinc sulphide-copper crystal phosphor. II. Fluorescence spectra of zinc sulphide-copper crystal phosphors at -185°, 20°, and 150°, I, 147, 386.
- and Takahashi, M., cathode materials. I. Zone model of the oxide cathodes, I, 196.
- Uehling, E. A. See Hellund, E. J.
- Uemura, T., and Hirasawa, N., pH in aqueous solutions of complex cobalt-aminines and their absorption spectra. V. Aqueous solutions of complexes containing the oxalate radical, I, 344.
- Ueno, S., and Takase, S., reduction of fatty acid amides under high pressure. I, II, 120.
- Ueno, Y. See Huzimaoto, K.
- Uetani, T., mitochondria in sternal puncture smears, III, 877.
- Ugami, S., biological activity of methyl-dihydrotestosterone. VII. Effect on normal young female rats, III, 582.
- See also Nakahara, W.
- Uhle, F. C. See Emerson, W. S.
- Uhlenbeck, G. E. See Nordsieck, A.
- Uhse, W., and Scherres, H., conservation of human milk, III, 225.
- See also Bessau, G.
- Ukita, T. See Asahina, Y.
- Ulich, H. See Hackenberg, E. G., and Siemonsen, H.
- Uljanov, A. A. See Michalev, P. F.
- Ullmann, L. V. See Deleano, N. T.
- Ullmann, M. A. P. See Deleano, N. T.
- Ullrich, H., photo-periodicity and blossoming hormones, III, 364.
- Ulrich, H., fatty infiltration of organs in oxygen lack and in hunger, III, 295.
- Ulrich, J., Cushing's syndrome, III, 402.
- Ulrich, K., family with congenital deaf-mutism in first part of 18th century and their descendants, III, 27.
- Ulshafer, P. R. See Marker, R. E.
- Ulsperger, E. See Reichel, L.
- Umana, E. M. See Lemarchands, M.
- Umber, F., diabetes mellitus and heredity, III, 434.
- Umeda, K., numerical calculation of activation energy for the Weizsäcker nuclear elongation, I, 6. Thomas-Fermi-Dirac equation, I, 343.
- Umeda, T. See Takahashi, Kiyōki.
- Umezawa, S., synthesis of condensed selenophens by action of acetylene on selenium, II, 59.
- Umezu, M., and Asami, N., lowering of freezing point of [anthrax] immune serum through addition of protective substance, III, 354.
- See also Hachihama, Y.
- Umhoefer, R. R. See Summerbell, R. K.
- Umstätter, H., structure mechanics of viscous-elastic continua. III. Thermodynamics of viscosity, I, 203.
- Underwood, N., displacement polarimeter, I, 374.
- See also Ingersoll, L. R.
- Undritz, E., Pelger-Huët blood picture in animals, III, 281.
- See also Wuhrmann, F.
- Ungar, G., determination of oxytocic action of cerebrospinal fluid as means of studying secretion of posterior pituitary, III, 406.
- and Parrot, J. L., relation between substance liberated during antidromic vasodilation and the hypotensor produced by enzymic transformation of adrenaline, III, 194.
- Unger, M., objective measurement of hearing, III, 26.
- Ungerleider, H. E., and Gubner, R., teleroentgen kymography [of heart], III, 383.
- Ungvárý, L. von, significance of chest leads [in electrocardiography], III, 190.
- Ungnade, H. E. See Emerson, O. H.
- Evans, H. M., Lauer, W. M., and Smith, L. I.
- Unkauf, H. See Peterson, F. C.
- Unna, K., antidermatitic effect of vitamin-B₆ analogues, III, 514.
- and Antopol, W., toxicity of vitamin-B₆, III, 514.
- See also Antopol, W., Folkers, K., Reedman, E. J., and Seudi, J. V.
- Uno, S., freezing of inorganic hydrogels, I, 411. Equilibrium of system $NH_3-P_2O_5-SO_3-H_2O$. I. Ternary systems $(NH_4)_2SO_4-H_2PO_4-H_2O$ and $(NH_4)_2SO_4-(NH_4)_2H_2SO_4PO_4-H_2O$. II. Ternary system $(NH_4)_2SO_4-NH_4H_2PO_4-H_2O$. III. Ternary system $NH_4H_2PO_4-H_3PO_4-H_2O$ and the quaternary system $NH_4H_2PO_4-(NH_4)_2H_2SO_4PO_4-H_3PO_4-H_2O$, I, 413. Physicochemical properties of ammonium sulphophosphate, $(NH_4)_2H_2SO_4PO_4$, I, 418.
- Untersteiner-Oechialini, L., urinary excretion of iodine in rabbits after administration of moniodohistidine, III, 601.
- Unwin, C. H. See Tincker, M. A. H.
- Uota, H. See Nishida, K.
- Uotila, U. U., rôle of pituitary stalk in regulation of anterior pituitary, III, 120. Effect of oestrin on anterior pituitary of male rats after pituitary stalk section, III, 403. Regulation of thyrotropic function by thyroxine after pituitary stalk section, III, 407. Fuchsinophile and pale cells in adrenal cortex tissue of fowl, III, 555.

- Uotila, U. U., masculinising effect of gonadotropic hormones on pullets compared with spontaneous ovario-genic virilism in hens, III, 648. Early embryological development of foetal and permanent adrenal cortex in man, III, 698.
See also Dempsey, E. W.
- Upham, R., and Spindler, F., studies on man with new secretagogue meal [meat extract], III, 35.
- Upson, F. W. See Robbins, G. B.
- Urbach, E., and Hill, W. R., classification of cutaneous lipoidoses; description of new local lipid dermatosis: imbitio lipoidica collageni degenerati cutis, III, 852.
- Urbain, A., Thiéry, J. P., Nevot, A., and Coutrade, R., titration of mallein *in vitro* and *in vivo*, III, 543.
- Urban, P. See Sexl, T.
- Urey, H. C., separation of isotopes by chemical means, I, 369.
See also Cohen, K., Hutchison, C. A., and Mills, G. A.
- Uribe, H. See Baños, A., *jun.*
- Urion, E., and Golovtchenko, V., nitrogenous composition of barley; effect of fineness of maceration on saline extraction, III, 617.
and Lejeune, G., fractionation of nitrogenous constituents of barley, III, 617.
- Urquia, D. A. See Benda, R.
- Urry, W. D. See Piggot, C. S.
- Urso, R. See Zummo, C.
- Ury, B., and Oldberg, E., effect of cortical lesions on affective pupillary reactions, III, 719.
- Usanovitch, M. I., negative temperature coefficients of the electrical conductivity of solutions, I, 219.
Sumarokova, T., and Udovenko, V. V., electrical conductivity, viscosity, and surface tension of the system $H_2SO_4-HClO_4$, I, 106. Conductivity, viscosity, and surface tension in the system $H_2SO_4-HClO_4$, I, 214.
See also Udovenko, V. V.
- Uschakov, M. I., and Madaeva, O. S., isomerisation of cholesterol α -oxide, II, 170.
See also Madaeva, O. S., and Tschinaeva, A. D.
- Uschakova, E. N. See Kretovitch, V. L.
- Usgöacar, S. See Mascarenhas, C.
- Usher, F. L. See Baker, A.
- Usio, S. See Otani, T.
- Ussher, N. T., viscerospinal syndrome: new concept of visceromotor and sensory changes in relation to deranged spinal structures, III, 636.
- Ussing, H. H., analysis of protein by means of deuterium-containing amino-acids, II, 60.
- Ust-Katschkintzev, V. F., flocculating action of binary systems. I, I, 213. Stratification in ternary systems. V, I, 216.
and Chlechnikov, P. A., stratification in ternary systems. IV. System water-ether-acid, I, 216.
- Utiyama, R. See Kobayasi, Minoru.
- Utter, M. F. See Wiggert, W. P.
- Utz, F., affections caused by light metals, III, 865.
- Utzino, S., and Chen, T. T., cathepsin in sarcoma tissue, III, 912.
and Kaiju, M., action of arginase, III, 347.
- Utzino, S., and Nakayama, M., kidney-peptidase, III, 534.
- Uyldert, I. E., water balance studies in adrenalectomised dogs, III, 29. Assay of cortical hormone, III, 210.
Thomassen, J., and Waterman, L., examination of blood of normal and adrenalectomised dogs in relation to cortin treatment. I, III, 210.
See also Waterman, L.
- Uzumaza, Y., and Doi, K., thiocyanate reaction of molybdenum, I, 39.

V.

- Vaerenbergh, J. van. See Wuyts, H.
- Vague, J. See Olmer, D.
- Vahlquist, B., serum-iron in children, III, 878.
- Vaidya, B. K., Raman spectra of geometrical isomerides, I, 96.
See also Asundi, R. K.
- Vail, D., corneal involvement in congenital ichthyosis (keratodermia), III, 802.
- Vainstein, F. M. See Poljakov, M. V.
- Vaisman, S. B., seven-membered heterocyclic ring compounds from *o*-phenylenediamine and acetylacetone derivatives, II, 109.
- Vajda, E. See Zechmeister, L.
- Valasek, J., X-ray emission spectra and electronic energy bands of compounds, I, 381.
- Valdivia, C. N., palta oil, III, 461.
- Valensi, G. See Markowska, (Mme.) D.
- Valenti, M., structure of Fabricius' sac and reticulo-endothelial system, III, 88.
- Valentine, E. H. See Rheinhold, J.
- Valentiner, S., system indium-tin, I, 206. Electrical resistance of indium and indium alloys, I, 288.
- Valeri, C. M., therapeutic action of nicotinic acid, III, 52.
and Paternò, P., effect of nicotinic acid on gastric secretion, III, 35.
- Valjaschko, M. G., fundamental physico-chemical laws of development of salt lakes. I. Natural classification of salt lakes, based on the composition of their water, I, 44.
- Vallance, R. H. See Friend, J. N.
- Vallarelli, G., hypotensive effect of hypertonic solutions of sodium chloride, III, 709.
- Vallarta, M. S., energy spectrum of primary cosmic rays, I, 189.
and Godart, O., world-wide periodic variations of intensity of cosmic radiation, I, 189.
- Vallenas, J. M., alkalinity of lipta and its influence on cocaineomania amongst the natives, III, 274.
- Vallender, B. See Lieb, F.
- Valley, G. See Barnes, S. W.
- Valley, G. E., magnetic spectrograph investigation of ^{19}N γ -radiation, I, 4.
and McCreary, R. L., internally converted γ -rays of several radioactive elements, I, 4.
- Vallois, H. V., Western Negrillos, III, 836.
- Vallrath, R. E., reaction of sulphur with mercuric acetate in glacial acetic acid, II, 265.
- Valotta, J. See Capizzano, N.
- Van Allen, J. See Allen, C. F. H.
- Van Allen, J. A. See Huxton, R. D.
- Van Arsdale, J. D. See Litkenhouse, E. E.
- Van Atta, C. M. See Northrup, D. L.
- Van Atta, L. C. See Northrup, D. L.
- Van Caneghem, D., pressure of cerebro-spinal fluid in Ménière's disease, III, 576.
- Vandecaveye, S. C., Fuller, W. H., and Katznelson, H., bacteriophage of *Rhizobia* in relation to symbiotic nitrogen fixation by lucerne, III, 940.
- Van de Erve, J. See Kinard, F. W.
- Van Dellen, T. R. See Scupham, G. W.
- Vandenbelt, J. M. See Ewing, D. T.
- Vandendriessche, A. See Billiet, V.
- Vandendriessche, L. See Massart, L.
- Van den Ende, M., urinary gonadotropic extracts and anaphylaxis *in vitro*, III, 642.
- Vanderbilt, B. M., and Hass, H. B., aldehyde-nitroparaffin condensations, II, 62.
- Vande Velde, A. J. J., hydrolysis of fish muscle proteins, III, 391. Hydrolysis of proteins. II. Alkaline hydrolysis of fish proteins, III, 531.
- Vandeveld, J. See De Waele, H.
- Vandever, W. E. See Spearman, M. P.
- Van de Voorde, C. See Maisin, J.
- Van Dyke, H. B., and Chen, G., distribution of lipins in genital tract of monkey at different stages in menstrual cycle, III, 739.
See also McKee, C. M., and Rake, G.
- Van Epps, C., and Kerr, H. D., familial lumbosacral syringomyelia, III, 890.
See also Hyndman, O. R.
- Van Epps, E. F., Hyndman, O. R., and Greene, J. A., clinical signs in paroxysmal hypertension [due to adrenal pheochromocytoma], III, 711.
- Van Ess, M. W. See Gilman, H.
- Vangelovici, M., and Serban, F., biosynthesis of sterols by *Aspergillus niger*, III, 450.
- Van Gulik, P. J., and Korteweg, R., susceptibility to follicular hormone and disposition to mammary cancer in female mice, III, 589.
- Van Harreveld, A., effect of asphyxia on reflex inhibition, III, 392.
- Van Hensverwyn, J., Collins, V. J., Williams, W. L., and Gardner, W. U., progesterone-like activity of deoxycorticosterone, III, 124.
- Folley, S. J., and Gardner, W. U., mammary growth in male mice receiving androgens, oestrogens, and deoxycorticosterone acetate, III, 128.
See also Gardner, W. U., and Kirschbaum, A.
- Van Hook, A., precipitation of silver chromate, I, 364.
- Vanjukova, L. See Bruns, B.
- Van Liere, E. J., Northrup, D. W., and Vaughan, P. E., effect of enteral absorption of fluids on recovery of blood pressure after severe haemorrhage, III, 470.
and Sleeth, C. K., effect of fluid extract of ergot and of ergotamine on emptying time of the human stomach, III, 62. Emptying time of normal human stomach as influenced by acid and alkali, III, 584.
See also Emerson, George A., Northrup, D. W., and Sleeth, C. K.
- Vannotti, A., and Imholz, A., relationship between reticulo-endothelial system and metabolism of non-haemoglobin iron, III, 382.
- Van Penrsem, R. L., preparation of cholesterolene and various cholestadienes, II, 248.

- Van Rysselberghe, P., thermodynamic potentials for perfect gas mixtures, I, 315.
- Vanselow, A. P., preparation of Nessler's reagent, I, 444.
- Vanselow, W., Happ, G. P., Russell, J., and Sheppard, S. E., Einthoven string galvanometer-amplifier system for the investigation of photovoltaic effects, I, 375.
- See also Sheppard, S. E.
- Van Slyke, D. D., Hiller, A., MacFadyen, D. A., Hastings, A. B., and Klemperer, F. W., hydroxylysine, II, 157.
- See also Folch, J.
- Van Vleck, J. H., paramagnetic relaxation times for titanium and chrome alum, I, 200, 312.
- Van Voorhis, C. C., preparation of thin films of uranium and thorium by cathode sputtering, I, 169.
- Van Voorhis, S. N. See Volker, J. F.
- Van Wagenen, W. P. See Bellows, R. T.
- Van Wegenen, G., and Morse, A. H., changes in exteriorised uterus, III, 849.
- Vanyo, M., and Engel, M., destruction of bacteria in experimental tumours by chemotherapeutics, III, 509.
- Varco, R. L. See Code, C. F., Dennis, C., and Walpole, S. H.
- Varela, M. E., and Mancini, R. E., influence of splenectomy on erythroblastic crisis occurring in spring in *Bufo arenarum*, III, 563.
- Varela-Fuentes, B., Canzani, R., and Grana, A., bilirubin, urobilin, and the yellow diazo-reaction in pneumonia and broncho-pneumonia sera, III, 285.
- Varga, I. See Müller, Alexander.
- Vargas, L. See Jedlicky, A., and Lipschütz, A.
- Varjoranta, K. See Wilska, A.
- Varma, P. S., Parekh, N. B., and Subramaniam, V. K., halogenation. XXI. Direct replacement of aromatic sulphonic groups by chlorine and bromine atoms, II, 39.
- Raman, K. S. V., and Yashoda, (Miss) K. M., condensation of arsenic chloride with dialkyl aromatic amines, II, 111.
- and Yashoda, (Miss) K. M., iodination of halogenated phenols, II, 41.
- Varney, R. See Evans, J. S.
- Varney, R. N., Loeb, L. B., and Haseltine, W. R., rôle of ionisation by positive ions in spark breakdown, I, 241.
- Vars, H. M. See Ravdin, I. S.
- Vartan, C. K., and Discombe, G., death from quinine poisoning, III, 527.
- Vartanian, A. T., ultra-violet absorption spectrum and fluorescence of benzidine vapour, I, 6.
- Vartiainen, I. See Marble, A.
- Varvasovszky, J. See Kup, J. von.
- Vasárhelyi, J., and Gözsy, B., purified tuberculin, III, 827. Chromatographic adsorption of purified tuberculin, III, 827.
- Vašiček, A., refractive index and thickness of thin interference films on glass, I, 331.
- Vasilco, O. See Mladoveanu, C.
- Vasilescu, C., and Teodorescu, E., congenital hypoplasia of one kidney with compensatory hyperplasia of other kidney, III, 464.
- Vasilieva, S. A. See Zaprometov, B. G.
- Vasilii, G. See Angelescu, E.
- Vasserman, E. S., and Mikluehin, G. P., chemiluminescence of hydrazides of carboxylic acids. II, 1, 374.
- Vassiliadis, H. C., carcinogenic properties of o-aminoazotoluene, III, 853.
- Vassiliev, A. A., and Vorobeva, N. P., solution of mercuric sulphide in acid solutions of potassium iodide, I, 228.
- Vassiliev, J. A. See Voitkevitch, A. A.
- Vassiliev, S. S., coagulating action of alcohols on protein solutions and the Traube rule, I, 25.
- Vassos, G. A., jun. See McDowell, A. M.
- Vassy, (Mme.) A., and Vassy, E., atmospheric [light] absorption. III, I, 50.
- Vassy, E., possibility of spectrographic detection of solar radiation in the region 2000—2200 Å., I, 423.
- See also Vassy, (Mme.) A.
- Vatna, S., oestrogenic substance and poisonous substance in storage root of *Butea superba*, Roxb., III, 442.
- Vaughan, J. See Brewer, H. F., and Fisher, R. A.
- Vaughan, J. B., and DeKay, H. G., athlete's foot and its control, III, 759.
- Vaughan, J. M., blood transfusion outfit, III, 92.
- Vaughan, P. E. See Van Liere, E. J.
- Vaughan, W. E., and Graves, N. R., P-V-T relations of propylene, I, 435.
- See also Rust, F. F.
- Vaughan, W. T., and Pipes, D. M., subcutaneous tissue pressure studies in urticaria and angioneurotic oedema, III, 842.
- See also Sullivan, C. J.
- Vaughn, A. M., experimental hibernation of metastatic growths, III, 855.
- Vaughn, R., effects of association and competition on *Acetobacter*, III, 934.
- Vdovenko, V. M., synthesis of tin hydride by the action of atomic hydrogen on tin chloride, I, 36.
- Veal, J. R., development of collateral venous circulation in extremities, III, 633.
- Veasey, C. A., jun., vitamin-B complex and nerve deafness, III, 400.
- Veen, A. G. van, composition of foodstuffs in relation to requirements and nutrition problems, III, 230.
- and Lanzing, J. C., vitamin-A levels of inhabitants of Java, III, 427.
- See also Koefoed, H. G., and Pannekoek-Westenburg, S. J. E.
- Veen, J. H. van der. See Wijk, W. R. van.
- Veer, J. B. V., and Norris, R. F., electrocardiographic changes in acute pericarditis, III, 98.
- Veer, W. L. C., melanins, their chemistry and significance, II, 239.
- Veerabhadra Rao, J. See Rao, N. V. S.
- Vegard, L., hydrogen showers in the auroral region, I, 87. Atmospheric layer from which the yellow line in twilight originates, I, 275.
- See also Tönsberg, E.
- Veghelyi, P. V., [metabolism in] giardiasis, III, 748.
- Vegter, J. J. M., effect of cortin on blood and excretion in men with healthy adrenal glands, III, 411.
- Vehrs, H. See Vidgoff, B.
- Veibel, S., and Darling, S., dismutation of p-tolylglyoxal, III, 346.
- Veiel, K., treatment of out-patients with depot insulin, III, 413.
- See also Dennig, H.
- Veil, C., colour changes in fish; (action of hormones and drugs), III, 408.
- See also Santa, N.
- Veil, (Mlle.) S., apparent repulsion of antagonistic diffusions of silver nitrate in pure gelatin and dichromated gelatin, I, 212.
- Veillon, R. See Boorsma, H. J., and Prévot, A. R.
- Veit, O., early development of head of *Petromyzon planeri*, III, 553.
- Vekslar, V., and Dobrotnin, N., secondary mesotrons, I, 91.
- Velasquez, J., and Engel, P., urinary excretion of gonadotropins in cattle suffering from cancer, III, 912.
- Veleulescu, A. I., detection of silver in very dilute solutions by physical development, I, 232.
- and Cornea, (Miss) J., detection of chloride ions in the presence of other halide ions, I, 130.
- See also Atanasiu, I. A.
- Veldee, M. V., human serum as stabiliser of scarlet fever streptococcus toxin diluted for Dick test, III, 265.
- Veldstra, H., Δ^5 -cholestadiene from cholesterol oleate and its possible bearing on formation of carcinogenic substances in heated fats, III, 44.
- Veletskaia, O. I. See Arkadiev, V. K.
- Velick, S. F., and Gorin, M., electrical conductance of ellipsoid suspensions, III, 825.
- and Scudder, J., plasma-potassium level in avian malaria, III, 629.
- See also Ponder, E.
- Velický, J. See Kruta, V.
- Vellinger, E., and Thomas, B., ultra-violet absorption spectrum of paraffins and vaselines, I, 193.
- Vellisto, E., importance of antigen for the agglutination reaction and an "absolute method" for the agglutination test, III, 359. Is Bitter's rhamnose reaction suitable for differentiation of organisms causing meat poisoning? III, 774. Specificity of agglutination test [in animal and human Bang infection], III, 868.
- Velluda, C. C. See Papilian, V.
- Velluz, L., photo-oxidisable diphenylanthracenes with cyclic substituent at positions 1:2, II, 74.
- Velten, C., and Noethe, R., pseudohermaphroditismus femininus and its relationship to adrenals, III, 497.
- Vendel, S. N. See Kristensen, K. P.
- Venkatachalam, K. See Ratnagiriswaran, A. N.
- Venkataraman, K. See Kaji, S. M.
- Venkataraman, K. S., adiabatic piezo-optic coefficients of water and alcohols, I, 16.
- Venkataraman, S., compound formation in solutions. I. Pyridine and acetic acid, I, 436.
- Venkataramiah, H. S. See Sibaiya, L.
- Venkateswarlu, K., polarisation of Raman lines in relation to molecular structure: SOCl_2 , MeCl , and BCl_3 , I, 9.
- See also Bhimasenachar, J.
- Venkateswaran, S. L., and Sreenivasaya, M., tyrosinase from *Dolichos lablab*, III, 532. Tyrosinase of *Dolichos lablab*. I. Determination; oxidation of various substrates, III, 931.
- Vennndt, H. See Dam, H.
- Vennesland, B. See Evans, E. A., jun.
- Venus-Danilova, E. D., aldehydes and hydroxy-aldehydes of the polymethylene series. VIII. Isomeric transformations of cyclobutanealdehyde, II, 45.
- Venzkovski, M. K., lesions in pregnant rabbit produced by protein-free diet, III, 142.
- Veraguth, A. J., and Diehl, H., 3-nitrophthalates of ethylene and diethylene glycol monoethers, II, 62.

- Verain, *M.*, photo-electric micro-photo-meter, I, 272.
- Verbitzki, *V. A.* See Filatov, *V. P.*
- Verbrugge, *F.* See Uber, *F. M.*
- Vercillo, *M. A.*, separation of *cis*- and *trans*-acids of the acrylic series; [nitrocinnamic acids], II, 171.
- Verda, *A.*, and Herzfeld, *E.*, rapid determination of nicotine, II, 60.
- Verder, *E.* See Evans, *A. C.*
- Verdonk, *A.*, aortic and carotid sinus chemoreceptors in monkey, III, 192.
- Veresehnja, *P. F.* See Tananaev, *N. A.*
- Verga, *G.* See Palumbi, *G.*
- Verhaart, *W. J. C.*, and Kennard, *M. A.*, corticofugal degeneration following thermocoagulation of areas 4, 6, and 48 in *Macaca mulatta*, III, 299.
- Verhoeff, *F. H.*, hyperphoria tests based on a new principle, III, 396. Improved kinetic test for binocular stereopsis, III, 488. Phi phenomenon and anomalous projection, III, 892.
- Verkade, *P. E.*, degradation of fatty acids in the living organism, III, 433.
- Verleger, *H.*, photo-effect and its application in photo-cells, I, 272.
- Verlende, *E.*, streaming potential and surface conductivity, III, I, 72.
- Verleysen, *A.* See Bernard, *E.*
- Verlinden, *C.* See Desai, *P.*
- Vermes, *M.*, Meunier, *P.*, and Raoul, *Y.*, poor reserves of vitamin-A in the hen's egg and in the liver of young chickens, III, 50.
- Vermeulen, *C.* See Dragstedt, *L. R.*
- Vermeulen, *D.*, spectral photometry, I, 234.
- Vermillion, *G.*, Jordan, *E.*, and Hauser, *C. R.*, acylation of aldoximes. IV. Benzoylation of *syn*- and *anti*-aldoximes, II, 131.
- Rainsford, *A. E.*, and Hauser, *C. R.*, acylation of aldoximes. III. Configuration of diphenylcarbamyl and picryl ether derivatives prepared from *syn*-aldoximes, II, 131.
- Verne, *J.*, action of substances inhibiting lipid oxidation demonstrated by the Feulgen-Verne histochemical reaction, III, 344.
- and Vilter, *V.*, effect of colchicine on mitosis of fibroblasts *in vitro*, III, 693.
- Verney, *E. B.* See Marshall, *F. H. A.*
- Vernon, *A. A.*, and Brown, *B. M.*, vapour-phase esterification of benzoic acid with ethyl alcohol: effect of oxides on catalytic activity of silica gel, I, 262.
- and Nelson, *H. A.*, chemical preparation of colloidal suspensions in non-aqueous solvents. I. Methyl alcohol and benzene. II. Ether, dioxan, and acetone, I, 161.
- and Thompson, *F. X.*, catalytic hydrolysis of chlorobenzene in the vapour phase, I, 367.
- See also Luder, *W. F.*
- Vernov, *S. N.*, transition maximum according to the data of observations from substratostats, I, 142. Divergencies between experimental data and deductions from the Bhabha-Heitler-Arley cascade theory, I, 142.
- See also Skobeltzyn, *D. V.*
- Verrier, *M. L.*, retinal factors in visual acuity of vertebrates, III, 115.
- Verrill, *K. J.* See Barnett, *(Miss) J.*
- Versey, *H. C.*, petrography of the Permian rocks in the southern part of the Vale of Eden, I, 84.
- Verstraete, *E. O. K.*, vapour pressure and volatility of war gases, I, 105.
- Vertruyen, *H.* See Bezzonoff, *N.*
- Verwey, *E. J. W.*, electric double layer and stability of emulsions, I, 70.
- See also Hamaker, *H. C.*
- Verwey, *W. F.*, type-specific antigenic protein derived from staphylococcus, III, 936.
- Verzár, *F.*, die Funktion der Nebennierenrinde [function of the adrenal cortex], III, 276.
- and Somogyi, *J. C.*, connexion between carbohydrate and potassium metabolism in normal and adrenalectomised animals, III, 497. Liberation of potassium from muscle by acetylcholine and muscle contraction and its absence after adrenalectomy, III, 714.
- See also Minibeek, *H.*, and Pulver, *R.*
- Vesell, *M.* See Lorber, *H.*
- Veselovski, *V. I.*, polarisation capacity and adsorption properties of the silver electrode, I, 220.
- Vest, *S. A.*, Drew, *J. E.*, and Langworthy, *O. R.*, implantation of crystalline testosterone in monkey, III, 901.
- and Howard, *J. E.*, implantation of androgens, III, 216.
- See also Hesser, *F. H.*, and Howard, *J. E.*
- Vestling, *C. S.*, metalloporphyrins. IV. Co-ordination of iron copro- and aetio-porphyrins with nitrogenous bases, II, 383.
- and Downing, *J. R.*, infra-red studies of the porphyrin molecule, I, 95.
- See also Clark, *W. M.*
- Vial, *J.* See Hermann, *H.*
- Vialli, *M.*, and Giovanni, *C.*, enterochromaffin cells in urogenital tract of *Lacerta muralis*, III, 374.
- Vibe, *K.*, prolactin content of human pituitary gland, III, 121.
- Vickery, *H. B.*, determination of arginine with flavianic acid, II, 200.
- Pucher, *G. W.*, Schoenheimer, *R.*, and Rittenberg, *D.*, assimilation of ammonia-nitrogen by tobacco plant, III, 940.
- See also Pucher, *G. W.*
- Victor, *E.* See Broda, *E. E.*
- Victor, *J.*, Steiner, *A.*, and Weeks, *D. M.*, pressor substance produced by anaerobic autolysis of renal cortex, III, 386.
- Victor, *J. C.* See Patekm, *A. J., jun.*
- Vidgoff, *B.*, inhibitory hormone of testes, III, 217.
- and Vehrs, *H.*, effect of inhibitory hormone of testes on pituitary, thyroid, and adrenal of adult male rat, III, 645.
- Vidyardhi, *N. L.*, and Mallya, *M. V.*, occurrence of an isomeride of ricinoleic acid in fatty oil from seeds of *Vernonia anthelmintica*, III, 273.
- Viehoeffer, *A.*, edible and poisonous beans (*Phaseolus lunatus*, L.), III, 831.
- Sokoloff, *N. H.*, and Taransky, *A. A.*, standardisation of digitalis, III, 333.
- Vieil, *H.* See Roche, *J.*
- Vienneau, *E. M.* See Ayres, *G. H.*
- Vierthaler, *R. W.*, and Blumenthal, *R. von*, rectal injection of serum, III, 664.
- and Gebauer, *H.*, reactivity of chlorine-containing disinfectants, particularly azochloroamide, towards nitrogenous substrates, III, 870.
- Viets, *H. R.*, and Schwab, *R. S.*, diagnosis and treatment of myasthenia gravis, III, 20.
- Vieuchange, *J.*, properties of a suspension prepared from the skin lesion provoked by injection of vaccinal virus, III, 268.
- and Stamatin, *L.*, *in vitro* study of the neutralisation of vaccinal virus by antiserum and passive immunity, III, 268.
- Vigness, *I.*, Watson, *C. J.*, and Spink, *W. W.*, relation of methemoglobin to cyanosis observed after sulphanilamide administration, III, 246.
- See also Stenstrom, *W.*
- Vihlein, *A.* See Boothby, *W. M.*
- Vijayasardhy, *M.*, "vacuum" flasks for preserving sugar-cane pollen, III, 550.
- Vilarino, and Pimentel, *J. V.*, counting of thrombocytes, III, 787.
- Vilenski, *V. A.*, and Korolev, *A. J.*, protein solvation in aqueous solutions of weak acids and bases, I, 24.
- See also Korolev, *A. J.*
- Villa, *G.*, structure of commissural fibres of the cervical sympathetic nerve in man, III, 24.
- Villain, *E.* See Tiede, *E.*
- Villalonga, *F.* See Marenzi, *A. D.*
- Villar, *G. E.*, possibility of existence of a second series of "rare earths" in the place reserved for actinium in the periodic table, I, 280.
- Villars, *R.*, cytological study of the action of thymol on plant cells, III, 459.
- Villedieu, See Dodel, *P.*
- Villela, *G. G.*, aneurin and blood-phosphorus compounds, III, 322.
- Vilter, *R. W.*, Aring, *C. D.*, and Spies, *C. D.*, vitamin-B₆ and α -tocopherol in arsenical peripheral neuritis, III, 891.
- Bean, *W. B.*, Rueggeger, *J. M.*, and Spies, *T. D.*, rôle of co-enzymes I and II in blood of persons with pneumococcal pneumonia, III, 630.
- Schiro, *H. S.*, and Spies, *T. D.*, effect of synthetic vitamin-B₆ on hæmopoietic system of man, III, 514.
- See also Bean, *W. B.*, Spies, *T. D.*, and Vilter, *S. P.*
- Vilter, *S. P.*, and Spies, *T. D.*, vitamin-B₆ as an accessory growth factor for *Staphylococcus albus*, III, 454.
- Vilter, *R. W.*, and Spies, *T. D.*, synthesis of co-enzymes I and II, III, 350.
- Vilter, *V.* See Bureau, *V.*, and Verne, *J.*
- Vimtrup, *B.* See Fridericia, *L. S.*
- Vinal, *G. W.* See Craig, *D. N.*
- Vinberg, *G.*, measurement of the rate of exchange of oxygen between a water basin and the atmosphere, I, 332.
- Vincent, *D.* See Jullien, *A.*
- Vincent, *H.*, liver dysphylaxis; physiopathological sequelae and their dependence on the lack of serum alexin, III, 769.
- Vincent, *J. P.* See Wikoff, *H. L.*
- Vincent, *(Miss) M. S.* See Wick, *(Miss) F. G.*
- Vincent, *R. S.*, cohesion of liquids, I, 348.
- and Simons, *A.*, thermal manometer, I, 134.
- Vincent, *W. B.* See Norton, *L. B.*
- Vineke, *E.*, blood substitution fluids. I, III, 9.
- and Never, *H. E.*, blood substitution fluids. II, III, 9. Pharmacology of vanillin derivatives, III, 153. Anti-coagulant action of neodymium acetate (Auer 144), III, 558.
- Viner, *N.*, encephalitis epidemics (lethargica) treated by sulphanilamide, III, 245.

- Vinet, A., physiological precursors of adrenalin, III, 729.
- Vinnikov, J. A., growth and differentiation of the retina *in vitro*, III, 674.
- Vinograd, J. R. See McBain, J. W.
- Vinogradova, E. See Feofilaktov, V. V.
- Vintemberger, P. See Ancel, P.
- Vinti, J. P., isotope shift in magnesium, I, 49.
- Violante, A. See Keys, A.
- Virchow, H., skeleton at le Moustier, III, 373.
- Viré, M., nephelometric determination of blood-urea by xanthhydrol, III, 560.
- Virgin, W. J., and Walker, J. C., relation of the near-wilt fungus to the pea plant, III, 944.
- Virkar, V. V., and Wheeler, T. S., chromones of the naphthalene series. I. Transformation of *o*-aroyloxyacetarones into *o*-hydroxydiarylmethanes. II. Synthesis of linear naphthaflavone (6:7-benzoflavone), II, 22.
- Virtanen, A. I., and Torniainen, M., factor influencing nitrogen excretion from leguminous root nodules, III, 270.
- Virtue, R. W., and Doster-Virtue, M. E., failure of intravenously injected fat to produce cholic acid in dogs, III, 596.
- Visscher, M. B., restriction of coronary flow as factor in heart failure, III, 15.
See also Dennis, C., Roepke, R. R., and Schulze, J. W.
- Vitale, E., molecular compounds in binary systems: benzoic acid and nitro-, hydroxy-, and amino-benzoic acids, I, 215.
- Vitez, S. von, pepsin-trypsin broth, III, 774.
- Vitjaeva, S. I. See Udovenko, V. V.
- Vittone, A. See Kobe, K. A.
- Vivien, J. H., hypophyseal-genital relations in teleosts and selacians, III, 301.
- Vizer, T., and Haban, G., changes in rabbit heart under thyroid administration, III, 15.
- Vladescu, R., and Stefanescu, H., ascorbic acid content of eyes of different animals, III, 24, 324.
See also Bertrand, G.
- Vladimirov, A. V., ammonium and nitrate supplies: effect on biochemical processes in leaves of *Nicotiana rustica*, III, 81.
- Vladimirskaia, M. A., time thresholds of the mitogenic effect on coagulation as related to concentration of colloid and electrolyte coagulator, I, 25.
See also Rabinerson, A.
- Vlasov, V. V. See Petrov, A. D.
- Vlassov, K. A., significance of limestones in the process of formation of ore bodies of the scarn type, I, 304.
- Vodar, B., Freymann, R., and Ta, Y., windows for studying the optical properties of hydrogen fluoride gas, I, 301.
See also Nicolle, J.
- Voegtlin, C. See Earle, W. R., and Maver, M. E.
- Voegtlin, W. L., treatment of alcoholism by establishing conditioned reflex, III, 722.
- Vogel, A. I. See Cowan, D. M.
- Vogel, H., phosphorylation of degradation products of starch, II, 120.
- Vogel, H. J. See Niederl, J. B.
- Vogel, P., and Bassen, F. A., sternal marrow of children in normal and in pathologic states, III, 5.
See also Rosenthal, N.
- Vogel, R., influence of various elements on the system iron-ferrous sulphide, I, 74. [Heterogeneous equilibrium in binary mixtures with maximum vapour pressure], I, 117.
and Jentsch-Uchinski, C., equilibrium diagram of the system iron-silicon-vanadium, I, 291.
and Töpker, H., equilibrium diagram of the iron-iron silicide-tungsten system, I, 156.
- Vogel, S. R. See Brown, C. L.
- Vogeler, G., ferrous iron-adrenaline complex, III, 643.
- Vogels, H. See Pringsheim, P.
- Voghel, D. See Binet, L.
- Vogl, A., multiple cholesterol stones in gall bladder, III, 502.
- Vogt, A., vitamin-C consumption in malignant disease, III, 234.
Wagner, H., Richner, H., and Meyer, G., old age in uniovular and binovular twins; hereditary origin of senile diseases generally attributed to oxogenous factors or to "over-use," III, 395.
- Vogt, H. G. See Getting, I. A.
- Vogt, J. H., determination of combined alkalis in biological material, III, 832.
- Vogt, M., action of phalloidin from *Amanita phalloides*, III, 157.
See also Marshall, F. H. A.
- Voichescu, P. See Spacu, G.
- Voigt, A. F. See Fajans, K.
- Voigt, D. See Gallais, F.
- Voinar, A. O. See Tschuiko, V. T.
- Voitkevitch, A. A., effect of pituitary on moulting of birds, III, 641.
and Vassiliev, J. A., effect of thyroidectomy on *Pica pica*, L., III, 408.
- Volák, F. See Bures, E.
- Volarovitseh, M. P., calculation of the activation energy and heat of fusion of feldspars and pyroxenes from viscosity measurements, I, 180.
and Leonteva, A. A., velocity of fall of liquid drops in melts, I, 18. Viscosity of meteorites, I, 45.
and Ravitsch, G. B., activation energy and heat of melting of fatty acids and triglycerides calculated from temperature relations of viscosity, I, 249.
- Vold, R. D., phase-rule behaviour of concentrated aqueous systems of a typical colloidal electrolyte; sodium oleate, I, 112.
- Volini, I. F., and Levitt, R. O., rabbit serum in pneumococcal pneumonia, III, 264.
- Volinski, F. A., and Kudriavtzeva, A. I., chemical processes in experimental bone atrophy, III, 551.
- Volkenshtein, N. S. See Naumov, S. N.
- Volkenzon, D. V. See Goldstein, B. I.
- Volker, J. F., effect of fluorine on solubility of enamel and dentine, III, 464, 852.
Hodge, H. C., Wilson, H. J., and Van Voorhis, S. N., adsorption of fluorides by enamel, dentine, bone, and hydroxyapatite as shown by the radioactive isotope, III, 755.
- Volkoff, G. M., Oppenheimer-Phillips process, I, 309.
- Volkov, E., and Dviniyaninova, I., denaturation of soya-bean proteins by organic solvents and by heat, III, 685.
- Volkov, N. F., fission of uranium nuclei, I, 142.
See also Chlopin, V. G.
- Volkova, M. I., and Melentev, B. N., composition of the Khibiny apatites, I, 179.
- Volklinger, H., Lecomte, J., and Tehakirian, A., Raman and infra-red spectra of the halogen derivatives of methane, I, 95.
- Vollenweider, C. See Marano, A.
- Voller, H. F. See Ehrhardt, K.
- Vollmer, E. P., Gordon, A. S., Levenstein, I., and Charipper, H. A., effects of hypophysectomy on blood picture of rat, III, 206.
- Vollmer, H., effect of single injection of caffeine on excretion of ions and urine volume, III, 587. Treatment of rickets and tetany by parenteral administration of one massive dose of vitamin-D, III, 595. Diuretic action of *Ononis* root and *Equisetum*, III, 760.
and Giebel, A., diuretic action of several combinations of fructus juniperi and radix ononidis, III, 154.
and Richter, G., urine in caffeine-tolerant rats, III, 587.
- Vollrath, R. E., translucent films of aluminium oxide, I, 265.
- Volmar, Y., and Wagner, A., colorimetric determination of ferric salts and of iron in blood using gallic acid, III, 370.
- Volnov, J. N., reaction of silicon tetrachloride with esters, II, 158.
- Volodina, O. A. See Naumov, S. N.
- Volpe, F. See Addarii, F.
- Volpito, P. P., Woodbury, R. A., and Hamilton, W. F., direct arterial and venous pressure measurements in man as affected by anaesthesia, operation, and shock, III, 476.
See also Robinow, M.
- Volqvartz, K. See Brönsted, J. N.
- Voltmer, E. J. See Tuttle, W. W.
- Vonderake, A. R. See Kotte, J. H.
- Vondrášek, V. See Glazunov, A.
- Vonglahn, W. C., and Flinn, F. B., effect of yeast on incidence of cirrhosis produced by lead arsenate, III, 502.
- Vonsovski, S. V., generalisation of the Heisenberg-Bloch theory [applied to] binary ferromagnetic alloys, I, 250.
- Vonwiller, P., and Rintschino, M., lymphatic vessels of heart in frog, III, 1.
- Voorhees, J. M. See Hawks, J. E.
- Voorhies, N. E. See Burch, G. E.
- Voorst, F. T. van, working up of iodine residues, I, 37.
- Vora, V. C. See Barve, P. M.
- Vorhaus, M. G., vitamins in relation to gastro-intestinal diseases, III, 34. Evaluation of vitamin-B₁ (thiamin chloride) in treatment of polyneuritis, III, 232.
- Voris, L., Ellis, G., and Maynard, L. A., determination with periodate of glycerol of neutral fat of blood; arterio-venous differences in neutral fat, III, 562.
- Vorobeva, M. N. See Rishkov, V. L.
- Vorobeva, N. P. See Vassiliev, A. A.
- Voroshilova, A. A. See Dianova, E. V.
- Voroshcov, N. N., and Strelzova, A. A., auto-oxidation of aromatic amines. I.—III, I, 35.
- Voroshcov, N. N., jun., and Kobelev, V. A., exchange of chlorine substituted in aromatic compounds for amino-groups. VI. Kinetics of reaction of *m*-chloronitrobenzene with aqueous ammonia in presence of cupric chloride. VII. Kinetics of reaction of 2-chloroanthraquinone with aqueous ammonia. VIII. Kinetics of reaction of *p*-chloroaniline, 1-chloronaphthalene, and sodium 1-chloronaphthalene-4-sulphonate with aqueous ammonia in presence of cuprous chloride, I, 31.

- Vorsina, M. A., and Frumkin, A. N., capacity of double layer of mercury electrode in dilute solutions of hydrochloric acid and of potassium chloride, I, 165.
See also Proskurnin, M. A.
- Vorwald, A. J., Delahant, A. B., and Dworski, M., silicosis and type III pneumococcus pneumonia, III, 761.
- Vos, B. J., jun. See Eichelberger, L., and Geiling, E. M. K.
- Vos, T. A. See Süllmann, H.
- Vosburgh, W. C., electrodes sealed in glass tubing, I, 446.
and Beckman, J. F., solubility of cadmium and zinc oxalates in salt solutions, I, 319.
- Dibeler, V. H., Parks, H. C., and Miller, W. J., system magnesium sulphate, cadmium sulphate, and water at 25° and 40°, I, 361.
See also Gould, R. K.
- Voskuhl, H. See Dyckerhoff, H.
- Voss, H., progressive bulbar paralysis and amyotrophic lateral sclerosis after chronic manganese poisoning, III, 155. Occupational manganese poisoning in the steel industry, III, 158.
- Voss, H. E., causation of singing in female canaries by male sex hormone, III, 902.
See also Rabald, E.
- Voss, V., and Immelman, M. N. S., deposition of thin metallic films by cathodic sputtering, I, 302.
- Vosskühler, H. See Siebel, G.
- Voth, G., granulocytopenia and leukemia, III, 8.
- Vourgait, M. See Mutschnik, S.
- Vournazos, A. C., compounds of lead halides with organic salts, I, 444.
- Vowles, R. B. See Schlenk, F.
- Vožeh, O. See Zadina, R.
- Voznesenski, S. A., fluorination; antimony fluoride as a fluorinating agent, II, 151.
- Vryonis, G., parasitisation of erythrocytes by *Plasmodium vivax*, with special reference to reticulocytes, III, 6.
- Vuillet, M. See Julien, A.
- Vukalovitch, M. P., and Novikov, I. I., equation of state of real gases, I, 18. Heat capacity of real gases, I, 248. Thermodynamical properties of real gases, I, 248. Determination of thermodynamic parameters of real gases, and investigation of water vapour, air, and diatomic gases, I, 248.
- Vuks, M. F., and Joffe, V. A., Raman spectra of binary silicate glasses, I, 194.
- Vunder, P. A., ovarian function and pituitary activity in captive anura, III, 126. Relationship between yearly sexual cycle and function of ovary and pituitary gland in anura, III, 126.
- Vyas, V. A., and Bokil, K. V., new products from condensation of anisole with acetonedicarboxylic acid. I. β -Di-*p*-anisylbutyric acid, II, 128. Synthesis of β -di-*p*-anisylpropionic acid, II, 128.
- W.
Wachstein, M. See Gottdenker, F.
- Wachtel, H. See Lustig, B., and Soskin, S.
- Wackher, R. C. See Grosse, A. V.
- Wada, E. See Kanamaru, K.
- Wada, M., and Fujii, K., effect of cold on rate of denervated heart in non-anæsthetised dogs, III, 884.
- Wada, S., white blood count in uræmia, III, 790. White blood count in cholæmia, III, 791.
- Waddell, W. W., jun., and Guerry, D., rôle of vitamin-K in ætiology, prevention, and treatment of hæmorrhage in newborn infant, III, 379.
- Waddington, C. H., order of magnitude of morphogenetic forces, III, 87. Organisers and genes, III, 780. Somatic mutations of straw locus in *Drosophila*, III, 835.
- Waddle, H. M., and Adkins, H., chlorination of butyl trichloroacetates, II, 64. and Saeman, W., thermionic relay, I, 302.
- Waddy, G. See Brodsky, I.
- Wade, A., and Prider, R. T., leucite-bearing rocks of the West Kimberley area, Western Australia, I, 397.
- Wade, F. B., tough soap films and bubbles, I, 110.
- Wade, N. J. See Griffith, W. H., and Katzman, P. A.
- Wade, W. H., Twellmeyer, G. O., and Yntema, L. F., deposition potentials of metals from fused alkali chloride-aluminium chloride baths, I, 441.
- Wadleigh, C. H., and Shive, J. W., organic acid content of maize plants as influenced by pH of substrate and form of nitrogen supplied, III, 458.
- Waegemans, G. See Adriaens, L.
- Waelsch, H., and Rittenberg, D., metabolism of glutathione, III, 327. and Sperry, W. M., composition of unsaponifiable lipins, III, 327.
See also Sperry, W. M.
- Wagenaar, G. H., identification of perchlorate, persulphate, and some other inorganic acid residues with Zwikker's reagent; sensitive reaction for copper, I, 299.
- Wagenaar, M., herapathite reaction on aristoin, II, 60.
- Wagener, H. P., thrombo-angiitis obliterans of retinal vessels, III, 301. Pathogenesis of syphilitic optic atrophy, III, 893. and Keith, N. M., diffuse arteriolar disease with hypertension and associated retinal lesions, III, 292.
- Wagers, R. P. See McLeod, W. M.
- Waggoner, R. W. See Sawyer, R. A.
- Wagner, A. See Volmar, Y.
- Wagner, C., and Grünwald, K., molecular species in aqueous quinuhydrone solutions, II, 311.
See also Hauffe, K.
- Wagner, D., local application of œstrogenic substances in chronic ulcerations, III, 581.
- Wagner, E. C., reactions of amidines as ammonio-carboxylic acids or esters, II, 193.
- Wagner, H. See Vogt, A.
- Wagner, H. C. C., action of vitamin-C in eczema, III, 235.
- Wagner, J., Raman effect. CVII. Methylene derivatives, I, 95.
See also Ballaus, O., and Kohlrausch, K. W. F.
- Wagner, J. A. See Strumia, M. M.
- Wagner, J. C., Sievers, R. F., Bennett, A. L., and McIntyre, A. R., spinal anaesthesia in dog, III, 525.
- Wagner, K. H. See Scheunert, A.
- Wagner, R. B. See Whitmore, F. C.
- Wagner, W., venous intermittent claudication, III, 194.
- Wagner-Jauregg, J., treatment of general paralysis of the insane, III, 201.
- Wagoner, G., and Pendergrass, E. P., "notch" shadows seen in lateral roentgenograms of vertebrae of infants, III, 463.
- Wagreich, H., Kamin, H., and Harrow, B., detoxication of phenylacetic acid by glycuronic acid in man, III, 755.
- Wagstaffe, F. J. See Thompson, H. W.
- Wagendonk, H. M. van. See Wibaut, J. P.
- Wahba, M. See Fakhoury, N.
- Wahl, A. C. See Seaborg, G. T.
- Wahl, H., vitamin-B₂ (lactoflavin) and thyroid gland, III, 513.
- Wahlgren, F., and Rudberg, S., case of intrathoracic sympatheticoblastoma in suckling, III, 890.
- Wahlstrom, E. E., graphic granite, I, 239. Ore deposits at Camp Albion, Boulder Co., Colorado, I, 398.
- Wahrhaftig, A. L., absorption spectra of liquid hydrogen fluoride and of its aqueous solution in the region 8000—11,000 Å., I, 243.
- Wain, R. L. See Glasscock, H. M.
- Wainman, L. M. See Bonser, G. M.
- Waisman, H. A., Mickelsen, O., and Elvehjem, C. A., distribution of chick anti-dermatitis factor (pantothenic acid) in meats and meat products, III, 324.
- Mickelsen, O., McKibbin, J. M., and Elvehjem, C. A., nicotinic acid potency of food materials and certain chemical compounds, III, 857.
See also Mickelsen, O.
- Waitkins, G. See McCroskey, C. R.
- Wajzer, J., formation and decomposition of glycogen-protein complex; determination of glycogen-protein; effect of electric stimuli and drugs on its decomposition, and its rôle in glycogen synthesis, III, 221.
- Wakabayashi, T., distortion of weak current passed through human body. I. Passage of m-sec. duration, III, 481.
- Wakamatsu, S., proteins of herring flesh, III, 43.
- Wake, I., and Goto, J., histo-pathological studies on endemic vesical tumour in Formosan yellow cattle (*Boszebu indicus*), III, 671.
- Wake, N. L. See Wardlaw, H. S. H.
- Wakefield, E. G., and Power, M. H., pH of human faeces, urine, and ileae dejecta, III, 40.
- Welch, C. S., and Mayo, C. W., process of intestinal rotation in man illustrated by dried intestines of cat, III, 277.
- Wakefield, R. F. See Keim, H. L.
- Wakeham, H. R. R. See Boyd, R. N., and Hildebrand, J. H.
- Wakelin, R. W., behaviour of *n*-decanoic acid in interfacial tension measurements, I, 69.
See also Peters, R. A.
- Wakeman, A. J. See Pucher, G. W.
- Wakerlin, G. E., reticulocytogenic principle in urine, III, 376.
See also Johnson, C. A., and Middleton, A. R.
- Wakim, K. G., Essex, H. E., and Mann, F. C., effect of whole bile and bile salts on perfused heart, III, 290.
- Walbran, W. J. See McMahon, B. C.
- Walch, H. See Wieland, H.
- Wald, D. See Necheles, H.
- Walden, G. H., jun. See Greenberg, A. L.
- Waldman, A., developing tank for electrocardiograms, III, 884.

- Waldman, B., and Collins, G. B., nuclear excitation of lead by X-rays, I, 190.
See also Collins, G. B.
- Waldmann, L., theory of method of Clusius and Dickel for separation of isotopes, I, 43.
- Waldschmidt-Leitz, E., and Mayer, Karl, polarographic diagnosis of cancer, III, 317.
- Walen, R. J. See Goldstein, L.
- Wales, W. T. See Quastel, J. H.
- Walinski, F., and Hahn, L., experiences with depot insulin, III, 29.
- Walk, I., phagocytosis in cells of exudates and transudates, III, 5.
- Walke, H., radioactive isotopes of scandium and their properties, I, 141.
Thompson, F. C., and Holt, J., radioactive isotopes of calcium and their suitability as indicators in biological investigations, I, 141. *K*-Electron capture and internal conversion in ^{51}Cr , I, 141.
- Walker, A. A. See Spies, T. D.
- Walker, A. C., and Reimann, S. P., polarographic studies of human sera [relation to diagnosis of cancer], III, 229.
- Walker, A. E., origin, course, and terminations of the secondary pathways of the trigeminal nerve in primates, III, 482. Dorsomedial thalamic nucleus, III, 799. Cytoarchitectural study of prefrontal area of *Macacus*, III, 801.
and Weaver, T. A., jun., ocular movements from occipital lobe in monkey, III, 802.
- Walker, A. M., effect of subcutaneous administration of water and salts on urinary volume, III, 223. Relation between pituitary gland and water diuresis, III, 303.
- Walker, B. S. See Barkan, G., and Darnell, M. C., jun.
- Walker, C. B., use of Purkinje figures as test for separated retina and other intra-ocular pathology, III, 802.
- Walker, C. E. See Waring, J. J.
- Walker, F. H. A. See Bottomley, A. C.
- Walker, J., N^4 -diethylaminoalkyl- N^2 -di-alkylsulphanilamides [*p*-diethylamino-alkylaminobenzenesulphonaldialkylamides] and related compounds, II, 249. Synthesis of $\omega\omega'$ -bis-2'-amino-4'-thiazolylalkanes and N^4 -2'-thiazolylsulphanilamides, II, 359. Isolation of toxic and immunising fractions from bacteria of the *Salmonella* group, III, 454.
- Walker, J. C. See Larson, R. H., Pryor, D. E., and Virgin, W. J.
- Walker, Osman J., and Finlay, G. R., determination of small amounts of fluorine in water, I, 370.
- Walker, Oswald J. See Child, C. L.
- Walker, R., and Pennington, A., movement of air pores of *Preissia quadrata* (Scop.), III, 691.
- Walker, R. D. See Sheppard, S. E.
- Walker, R. W. See Dean, E. W.
- Walker, T. F., and Sweeney, P. A., counting blood platelets, III, 10.
- Walker, W. E. See Cox, G. J.
- Wall, F. T., ionic character and dipole moments, I, 244. Removal of substituents from vinyl polymerides, II, 201.
and Holley, C. E., jun., thermal diffusion separation of different gases of the same mol. wt., I, 302.
and McMillan, G. W., infra-red absorption studies of hydrocarbons, I, 402.
- Wall, L. M. See Donelson, E. G., and Leichsenring, J. M.
- Wall, M. E., and Tiedjens, V. A., potassium deficiency in ammonium- and nitrate-fed tomato plants, III, 545.
- Wall, M. J. See Smadel, J. E.
- Wall, R. See Heller, V. G.
- Wallace, A. B., demonstrating the posterior abdominal wall lymphatics and dye absorption thereby, III, 177.
- Wallace, G. B., and Brodie, B. B., passage of bromide, iodide, and thiocyanate into and out of cerebrospinal fluid, III, 335.
- Wallace, T., magnesium deficiency of fruit trees: comparative base status of leaves of apple, gooseberry, and black currant receiving various manurial treatments under conditions of magnesium deficiency, III, 944.
- Wallbach, G., action of benzole and thorium-X on leucocytes, III, 8. Pharmacodynamics of hepatic necrosis, III, 135. Adsorptive function of charcoal in intestine, III, 219. Inflammation caused by secretagogues to digestive tract, III, 415.
- Wallbaum, H. J., vanadium silicide, V_2Si , I, 150.
See also Laves, F.
- Walle, P. van de. See Putzeys, P.
- Wallén, K. A. See Stelling, O.
- Wallenfels, K. See Hartmann, M.
- Waller, J., cause of increased fragility of erythrocytes in congestive heart failure, III, 91.
- Waller, W. H., thalamic degeneration induced by temporal lesions in cat, III, 799. Progression movements elicited by subthalamic stimulation, III, 799. Thalamic connexions of frontal cortex of cat, III, 799.
- Wallerstein, J. S., and Schade, A. L., nature of yeast. I. Structure and functions of the cell, III, 867.
- Wallersteiner, K., the aldehydes in the chemotherapy of tumours, III, 508.
- Wallgren, A., lingual application of eumydrin in treatment of congenital pyloric stenosis, III, 741.
- Wallgren, P. See Hedvall, J. A.
- Walling, C., Kharasch, M. S., and Mayo, F. R., peroxide effect in the addition of reagents to unsaturated substances. XXII. Addition of hydrogen bromide to trimethylethylene, styrene, crotonic acid, and ethyl crotonate, II, 2.
- Wallis, E. S. See Chakravorty, P. N., Gilbert, W. I., Ladenburg, K., and Lane, J. F.
- Walls, G. L., pigment of vertebrate lens, III, 489. Image expansion by foveal clivus, III, 575.
- Walmesley, R., development of patella, III, 464.
- Walp, L., culture technique for quantitative growth studies with Myxophyceae, III, 351.
- Walpole, S. H., Varco, R. L., Code, C. F., and Wangenstein, O. H., production of gastric and duodenal ulcers in the cat by intramuscular implantation of histamine, III, 850.
- Walsh, A. D. See Price, W. C.
- Walsh, A. I. See Looney, J. M.
- Walsh, E. L. See Britton, J. A.
- Walsh, F. B. See Ford, F. R.
- Walsh, F. E. See Eveleth, M. W.
- Walsh, G., and Pool, R. M., disease and negro: thyroid involvements, III, 407.
- Walsh, M. N., reflex inhibition of muscular contraction as clinical phenomenon, III, 798.
See also Yeager, C. L.
- Walsh, V. G. See Frazer, A. C.
- Walston, H. See Carter, G. S.
- Walstra, W. K. See Keesom, W. H.
- Walter, E. M. See Cook, E. S.
- Walter, J., and Beach, J. Y., radial distribution method in electron diffraction, I, 404.
See also Beach, J. Y.
- Walter, L. A., and Fosbinder, R. J., 2-alkylmercurithiopyridine-5-carboxylic acids; preparation and stability of their solutions, II, 288.
- Walter, O. See Kubaschewski, O.
- Walter, R. I., Geist, S. H., and Salmon, U. J., appearance of gonadotropic hormone in urine of women after ovariectomy, III, 737. Absorption rates and biological effects of α -oestradiol and α -oestradiol benzoate in women, III, 849.
See also Geist, S. H., and Salmon, U. J.
- Walter, W. G., electrically induced convulsions, III, 571.
See also Cate, J. ten, and Fleming, G. W. T. H.
- Walters, P. M., and McElvain, S. M., keten acetals. VI. Preparation of keten acetals from α -bromo-ortho-esters, II, 296.
- Walters, W. See Barker, N. W., and Braasch, W. F.
- Walters, W. D., thermal decomposition of diacetyl, I, 259.
See also Gantz, G. M., and Rice, F. O.
- Walther, A., and Inge, L., electrical breakdown of rock-salt at high temperatures, I, 14.
- Walther, G., effect of vitamin-C on allergic pneumonia in guinea-pigs and rabbits, III, 430.
- Walther, O., embolism following hysterol-salpingography with lipiodol, III, 475.
- Walther, R. See Hartman, F. A.
- Waltman, C. A. See Taylor, H. C.
- Walton, C. See Johnston, C. G.
- Walton, E., reactions of $\Delta^8\gamma$ -lactones, II, 232.
- Walton, G. N. See Parkes, G. D.
- Walton, J. H. See Larsen, E. C.
- Walworth, H. T. See Witheridge, W. N.
- Walzer, A., direct technique for demonstrating percutaneous absorption of antigens, III, 614.
- Walzer, M., allergy, III, 829.
See also Albert, M., Gray, I., and Harten, M.
- Wambacher, H. See Stetter, G.
- Wan, S. W., and Dodge, B. F., solubility of carbon dioxide in benzene at elevated pressure, I, 107.
- Wang, C. C., Hogden, C. G., and Genther, I., fat and protein metabolism and creatinine and creatine output in children with nephrosis, III, 149.
- Wang, C. F., preparation of crystalline proteins from the seeds of water-melon, gourd, pumpkin, etc., III, 695.
and Wu, H., coagulation and denaturation of ovalbumin by shaking, III, 531.
- Wang, E., clinical and experimental investigations on creatine metabolism, III, 432.
- Wang, G. H., and Lu, T. W., spontaneous activity of spinal tadpoles of frog and toad, III, 889.
- Wang, S. See Wessely, F. von.

- Wang, S. C., and Ranson, S. W., autonomic responses to electrical stimulation of lower brain stem, III, 798. Descending pathways from hypothalamus to medulla and spinal cord; blood pressure and bladder responses, III, 799.
See also Clark, G.
- Wang, S. H. See T'ang, B. H. Y.
- Wang, S. N., ellipsoids of polarisation of bonds and octets, I, 11.
- Wang, W. C. See Tang, T. H.
- Wang, Y. L., and Yudkin, J., assessment of level of nutrition; urinary excretion of aneurin at varying levels of intake, III, 428.
- Wangenstein, O. H., experimental and clinical observations relating to management of acute bowel obstruction, III, 416.
- Hall, Harry, Kremen, A., and Stevens, B., intravenous administration of bovine and human plasma to man: proof of utilisation, III, 704.
See also Bellis, C. J., Dennis, C., McQuarrie, I., and Walpole, S. H.
- Wannow, H. A., quantitative measurement of coagulation, I, 113.
- Wappler, R. See Heilmann, P.
- Waraich, G. A. See Madden, S. C.
- Warburg, E. See Plum, P.
- Warburg, O., and Christian, W., isolation and crystallisation of protein of the carbohydrate-oxidising enzyme, III, 345.
- Ward, C. C., construction, testing, and operation of laboratory fractionating columns, I, 177.
- Ward, C. E., and Horton, B. T., congenital arteriovenous fistula in children, III, 793.
- Ward, E. D., and Petrie, A. H. K., physiological ontogeny in tobacco plant. III. Drifts in organic content of the leaves in relation to phosphorus supply and topping, III, 546.
- Ward, E. M. See Mackenzie, J. C. H.
- Ward, E. N. See Potter, T. S.
- Ward, J. C., Crabtree, D. G., and Garlough, F. E., red squill. VIII. Bio-assay, III, 924.
- Spencer, H. J., Crabtree, D. G., and Garlough, F. E., red squill. VII. Effect of altitude on toxicity in rats, III, 924.
See also Crabtree, D. G.
- Ward, N. E. See Nielsen, J. R.
- Ward, R. E., Bechdel, S. I., and Guerrant, N. B., carotene and vitamin-A in nutrition of growing dairy cattle, III, 817.
- Ward, S. M. See Lavin, G. I., and Rivers, T. M.
- Ward, W. E., apparent oxidation-reduction potentials of bright platinum electrodes in synthetic media cultures of bacteria, III, 933.
See also Halliday, N.
- Wardlaw, C. W., and Leonard, E. R., tropical fruits. IX. Respiration of bananas during ripening at tropical temperatures, III, 941.
- Leonard, E. R., and Barnell, H. R., tropical fruits. VII. Banana fruits in relation to studies in metabolism, III, 82.
- Wardlaw, H. S. H., and White, C. J. [with Fisher, R., and Wake, N. L.], diet of some Australian schoolboys, III, 509.
- Warhurst, E. See Haresnape, J. N.
- Warin, J. F., Schick immunity after active immunisation, III, 770.
- Waring, C. E., Hyman, H., and Steingiser, S., magneto-optic rotation: carbon disulphide and benzene solutions, I, 403.
- Waring, H., chromatic behaviour of eel (*Anguilla vulgaris*, L.), III, 808.
- Waring, J. J., Ravin, A., and Walker, C. E., dystrophia myotonica, III, 635.
See also Ravin, A.
- Waring, W. S. See Palmer, G. D.
- Wark, E. E., and Wark, I. W., periodic action [of nitric acid on amalgamated lead], I, 43.
- Wark, I. W. See Wark, E. E.
- Warkany, J., and Mitchell, A. G., diabetes insipidus in children, III, 28.
and Nelson, R. C., changes in anterior pituitary gland of rats with experimental goitre. II, III, 407.
- Warkentin, J. See Smith, K. U.
- Warner, D. See Hoyt, T.
- Warner, E. D., Brinkhous, K. M., Seegers, W. H., and Smith, H. P., thrombin as haemostatic agent, III, 10.
- De Gowin, E. L., and Seegers, W. H., decrease in prothrombin titre of human blood during storage, III, 559.
- and Flynn, J. E., absorption of water-soluble vitamin-K from intestinal tract, III, 916.
See also Brinkhous, K. M., and Flynn, J. E.
- Warner, J. C. See Ablard, J. E.
- Warner, M. P., contraception, III, 905.
- Warner, S. G., and Reinhard, M. C., effect of X-rays on tumour of known genetic constitution, III, 424.
See also Reinhard, M. C.
- Warnock, G. M. See Duckworth, J.
- Warrack, G. H. See Oakley, C. L.
- Warren, B. E., and Pincus, A. G., atomic consideration of immiscibility in glass systems, I, 436.
- Warren, C. D., jun., metabolism of rabbit bone marrow in serum, III, 556.
- Warren, C. F. See Coggeshall, H. C.
- Warren, D. C., and Conrad, R. M., growth of hen's ovum, III, 211.
- Warren, F. L., relative kidney weights of male and female mice, III, 851.
See also Schönberg, A.
- Warren, J. See Woglom, W. H.
- Warren, J. B. See Lee, A. R.
- Warren, L. H. See Schwartz, Louis.
- Warren, M. F. See Maurer, F. W.
- Warren, R., serosal and mucosal dimensions at different levels of dog's small intestine, III, 621.
and Rhoads, J. E., hepatic origin of the plasma-prothrombin; observations after total hepatectomy in the dog, III, 185.
- Warren, R. E. See Plain, G. P.
- Warren, S., and Gates, O., radiation pneumonitis; experimental and pathologic observations, III, 795.
See also Fogg, L. C.
- Warren, S. L. See Boak, R. A., and Ide, A. G.
- Warren, W. B., laboratory apparatus, its evolution and development, I, 42.
- Warshaw, R. See Koster, H.
- Warsi, S., *Celastrus paniculatus*, III, 617.
- and Siddiqui, S., constituents of *Didymocarpus pedicellata*. III. Isolation of a sesquiterpene and two polyterpene products and examination of the fatty matter. IV. Isolation of two new colouring matters and their relationship to pedicin, II, 49, 100.
- Wartenberg, H., redox potentials of suspensions and expressed juices of plant tissue, III, 361.
- Wartenberg, H. von, heat of formation of Ag_2I , I, 118.
- Wartenberg, R., "numeral test" in transverse lesions of spinal cord, III, 198.
- Wathin, T. A. See Thomas, C. B.
- Wartiovaara, V., effect of temperature on permeability of cells of *Tolypellopsis stelligera*, III, 69.
- Wartman, W. B., and Ingraham, E. S., jun., chemotactic properties of tuberculo-phosphatide and tuberculopolysaccharide, III, 689.
- Warwick, M. H., and Parkes, A. S., absorption of progesterone and deoxycorticosterone, III, 579.
- Was, D. A., and Tol, T., crystallisation of thin gold films by electronic bombardment, I, 209.
- Washburn, E. R., and Beguin, A. E., ternary system: isopropyl alcohol, toluene, and water at 25°, I, 206.
- Graham, C. L., Arnold, G. B., and Transue, L. F., ternary systems involving cyclohexene, water, and methyl, ethyl, and isopropyl alcohols, I, 361.
- and Keim, C. P., spreading of volatile organic liquids on water in the presence of unimolecular films, I, 356.
See also Keim, C. P.
- Wasserman, E. S., chemiluminescence of luminol, I, 58.
- Wassermann, A. See Newitt, D. M.
- Wassink, E. C., and Katz, E., initial changes in chlorophyll fluorescence in *Chlorella*, III, 692.
- Katz, E., and Dorrestein, R., infra-red absorption spectra of purple bacteria, III, 166.
See also Katz, E.
- Wastl, H., detoxication of local anaesthetics, III, 251.
- Wataghin, G., limits of validity of quantum mechanics, I, 54. Explosion showers, I, 91.
- Santos, M. D. de S., and Pompeia, P. A., simultaneous penetrating particles in cosmic radiation, I, 91, 188.
- Watanabe, A., formation of mixed crystals or molecular compounds from the binary systems of keto-derivatives of camphor, I, 164. Hydrolysis of vitamin-B₁ in aqueous solution, III, 233.
- Watanabe, Kazuo. See Hiramoto, M.
- Watanabe, Kenichi. See Strong, J.
- Watanabe, M. See Ishiguro, T.
- Watanabe, T., Takata reaction in erythrocyte and leucocyte emulsions, III, 877.
- Watanabe, Toshio. See Kondo, H.
- Watanabe, Y., and Mizuguchi, Y., strain of acid-fast organisms resembling B.C.G., isolated from tuberculous lung of dog, III, 266.
and Nonaka, N., hereditary transmission of rat leprosy. I, III, 541.
- Waterman, H. I., Leendertse, J. J., and Hesselink, R., condensation of olefines and paraffins by means of sulphuric acid, II, 2.
- Leendertse, J. J., and Krevelen, D. W. van, preparation of pure hydrocarbons for testing the physical methods in use for examination of hydrocarbon mixtures. I, II, 73.

- Waterman, H. I., Leendertse, J. J., and Sirks, J. F., preparation of pure hydrocarbons for testing the physical methods in use for examination of hydrocarbon mixtures. II, 11, 73.
See also Heertjes, P. M.
- Waterman, L., survival of adrenalectomised rats, III, 497.
- Uyldert, I. E., Thomassen, J., and Oestreicher, F., examination of blood of normal and adrenalectomised dogs in relation to cortin treatment. II, III, 210.
See also Uyldert, I. E.
- Waterman, N., position of virus tumours, III, 141. Experimental cancer of the stomach: relation to human stomach cancer, III, 422.
- Waters, D. F., iodine survey of New Zealand livestock. V. Sheep of the North Island, III, 47.
- Waters, L. L., indirect blood pressure determinations in dogs by Friedman oscillometer, III, 565.
See also Winternitz, M. C.
- Waters, R. M. See SeEVERS, M. H.
- Waters, W. A., decomposition reactions of aromatic diazo-compounds. IX. Oxidation mechanisms, III, 14. 3:4'-Dinitrodiphenyl, II, 210.
See also Hanby, W. E., and Stephenson, O.
- Waterstone, M. L. See COHEN, A. E.
- Watkins, C. H., and Hall, B. E., monocytic leukemia of Naegeli and Schilling types, III, 790.
- Watkins, G. M., and Watkins, M. O., pathogenic action of *Phymatotrichum omnivorum*, III, 272.
- Watkins, K. H., cyst of kidney due to hydrocalycosis, III, 503.
- Watkins, M. O. See WATKINS, G. M.
- Watkins, T. F. See BOWDEN, S. T.
- Watkins, T. I. See HINKEL, L. E.
- Watrous, W. G., axon branching after nerve regeneration, III, 843.
See also Morgan, M. W., jun.
- Watson, C. J., red pigments of pellagra urines, III, 52. Porphyrins and diseases of the blood, III, 276.
and Schwartz, S., method of separating small quantities of coproporphyrin isomerides I and III, II, 315.
- Spink, W. W., and Everts, R. L., sulphanilamide and sulphapyridine and haemoglobin metabolism, III, 677.
See also Arnow, L. E., Stenstrom, K. W., and Vigness, I.
- Watson, E. M., treatment of Paget's disease by adrenal cortical preparations, III, 409. Effect of adrenal cortical extract on serum-phosphatase in chronic arthritis, III, 897.
See also Williams, H. L.
- Watson, H. M. S. See FOLLEY, S. J.
- Watson, J. M., development of Weberian ossicles and anterior vertebrae in goldfish (*Carassius auratus*), III, 3.
- Watson, M. C., effect of cervical secretions on vitality of spermatozoa, III, 307.
- Watson, M. V. See HOLBROOK, A. A.
- Watson, R., physiological ontogeny in the tobacco plant. II. Drifts in water content of leaves in relation to phosphorus supply and topping, III, 80.
- Watson, R. A., analysis of 583 glucose tolerance tests, III, 238.
- Watson, R. F. See STEWART, H. J.
- Watson, W. L., blood and lymph vessel tumours in children, III, 46.
- Watson, W. W., concentration of heavy carbon by thermal diffusion, I, 35. Thermal separation of isotopes, I, 332. High-pressure arc as spectroscopic source, I, 394.
and Simon, R., spectra of lead hydride and tin hydride in the near infra-red, I, 281.
See also Lane, C. T., and Pollard, E.
- Watt, B. E. See BENNETT, W. E.
- Watt, S. B. See THOMPSON, A. F., jun.
- Watterson, D. J., mechanisms of convulsive phenomena, with reference to effects of vasodilator drugs, III, 22.
- Wattman, R. See LUBIN, S.
- Watts, J. W. See FREEMAN, W.
- Watts, P. S., *Erysipelothrix rhusiopathiae*, III, 541.
- Watz, M. See WETZEL, U.
- Waud, R. A., action of *Klamia augustifolia* (lambkill), III, 682.
- Waugh, D. B., and Waugh, L. M., effects of natural and refined sugars on oral lactobacilli and caries among primitive Eskimos, III, 748.
- Waugh, J. M. See McDONALD, J. R.
- Waugh, L. M. See KARSHAN, M., Rosebury, T., Siegel, E. H., and Waugh, D. B.
- Waugh, T. R., and Lamontagne, H., a case of hereditary haemolytic jaundice, III, 289.
- Merchant, F. T., and Maughan, G. B., blood studies on newborn. I. Determination of haemoglobin, volume of packed red cells, reticulocytes, and fragility of erythrocytes over 90-day period. II. Direct and total blood-bilirubin: determinations over a 90-day period with special reference to icterus neonatorum, III, 281, 285.
- Waugh, W. G., acceleration of wound healing, III, 466.
- Wawra, C. Z. See HAAGEN-SMIT, A. J.
- Wawzonek, S., attempt to synthesise a substituted cyclooctatetraene, II, 209.
See also EVANS, H. M.
- Wax, J. H. See AMOLSCH, A. L.
- Way, E. L. See ONETO, J. F.
- Way, S. C., and Memmesheimer, A., sudoriparous glands. III. Sweat, III, 697.
- Wayburn, E., and Cherry, C. B., Takata reaction in serum, III, 12.
and Guerard, C. R., peripheral neuropathy and cirrhosis of liver, III, 844.
- Wayman, M., and Wright, G. F., continuous extraction of aqueous solutions by acetone-light petroleum, I, 236.
- Weakley, C. E., jun., and Dustman, R. B., bilateral variation in weight and composition of long bones of experimental animals, III, 42.
- Wearn, J. T. See MILLER, F. R.
- Wearn, R. B. See ADAMS, R.
- Weast, C. A., and Mackinney, G., chlorophyllase, III, 608.
- Weatherburn, A. S. See ARDAGH, E. G. R.
- Weatherby, J. H., rate of elimination of nicotine by rabbit, III, 338. Determination of chemical irritation, III, 945.
See also HULPIEN, H. R.
- Weatherford, H. L., innervation of teeth in albino rat: finer structure of pulp, III, 374. Tusks of an Indian elephant—innervation of pulp, III, 785.
and Trimble, H. C., intranuclear crystals in hepatic cells of the dog: pure breed and hybrid Dalmatian, III, 836.
- Weatherhead, (Miss) A. P. See KERMACK, W. O.
- Weatherhead, A. V., preparation of thin sections of clays, I, 334.
- Weaver, C. See PRICE, C. C.
- Weaver, H. M. See TOOMEY, J. A.
- Weaver, J. E. See BUKEY, F. S.
- Weaver, J. W. See SYDENSTRICKER, V. P.
- Weaver, T. A., jun., and Bucy, P. C., anatomical relationships of hypophyseal stem and median eminence, III, 847.
See also Walker, A. E.
- Webb, C. S. See HUXLEY, J. S.
- Webb, D. A., ionic regulation in *Carcinus maenas*, III, 668.
and Danielli, J. F., concentration of cations at negatively-charged surfaces, I, 390.
and Young, J. Z., electrolytes and action potential of giant nerve fibres of *Loligo*, III, 714.
- Webb, F. J. See GILMAN, H.
- Webb, G. B. See BENEDICT, M.
- Webb, H. W. See MOORE, G. E.
- Webb, J. H., theory of photographic latent image formation, I, 417.
and Evans, C. H., low-intensity reciprocity law failure in photographic exposure, I, 367.
- Webb, M. See BLOCK, R. J.
- Webb, R. A. See BIRKINSHAW, J. H.
- Webb, R. L., and Simer, P. H., regeneration of greater omentum in dog, III, 697.
- Webber, H. E., X-ray densitometer for measuring relative density of muscle, bone, and other tissues, III, 69.
- Webber, T. G. See FIESER, L. F.
- Weber, A., practical value of electrocardiogram, III, 190.
- Weber, A. H., and Kirsch, S. C., vapour pressure of liquid bismuth between 603° and 638°, I, 314.
- Weber, C. J. See MAJOR, R. H.
- Weber, D. See SADOVSKY, A.
- Weber, E., and Selbaeh, H., intravascular determination of pH, III, 881.
- Weber, Ernst, nature of the Hall effect, I, 387.
- Weber, F. See GUY, W. H.
- Weber, F. C. See MILHORAT, A. T.
- Weber, F. P., and Scholtz, M., congenital vesico-vaginal fistula with imperforate hymen; hydrops foetalis and erythroblastosis and polydactyly, III, 464.
- Weber, H. C. See YORK, R., jun.
- Weber, H. P. See HEYMAN, E.
- Weber, J. E. See HARTMAN, R. J.
- Weber, U. von, determination of the branched isomerides in mixtures of paraffin hydrocarbons, II, 31.
- Webster, B. See BAHR, G., and Hoskins, W.
- Webster, V. S., preparation and oxidation of substituted cinnamic acids, II, 329.
- Wechsler, I. S., vitamin-E in amyotrophic lateral sclerosis, III, 568. Intravenous paraldehyde for convulsions, III, 801.
See also Davison, C.
- Weckert, F., fusion [in vision], III, 491. Binocular vision, III, 491.
- Weddell, G., Harpman, J. A., and Lambley, D. G., innervation of musculature of tongue, III, 297.
See also Straus, W. L., and Woollard, H. H.
- Wedekind, T. See GOHR, H.
- Wedemeyer, K., red blood count of healthy female adolescents between 13 and 20 years, III, 5.
- Weedon, F. R., Hartzell, A., and Setterstrom, C., effects on animals of prolonged exposure to sulphur dioxide, III, 68.

- Weekers, R., surviving lens according to method of De Haan-Bakker, III, 115, 397. Transitory experimental modification of refraction of ocular media, III, 300. Carbohydrate metabolism of isolated crystallin, III, 327. Lens glycolysis, III, 489. Glucose content of cornea and lens in normal state and in experimental variations of blood-sugar, III, 638.
- and Sällmann, H., relation between phosphate metabolism and lactic acid formation in the lens, III, 203.
- Weeks, D. M. See Victor, J.
- Weeks, J. E., scintillating scotoma and other subjective visual phenomena, III, 640.
- Weeks, W. F. See Bernthal, T.
- Wefelmeier, W., properties of the samarium nucleus and its structural isomerism, I, 89.
- Wegner, H. See Weidenhagen, R.
- Wegner, M. I. See Hart, E. B.
- Węgria, R., proof of excitability of mammalian ventricles during systole, III, 563.
- See also Wiggers, C. J.
- Wehr, W., ageing phenomena and molecular dimensions of chain complexes in solution. [II.], I, 71.
- Wehre, E. See Abelin, I.
- Wehrli, M., diffuse band system of the selenium dichloride molecule, I, 192.
- and Wenk, W., absorption spectra of indium chloride, indium bromide, indium iodide, and gallium chloride in the Schumann region, I, 400.
- Wei, S. S. See Chi, Y. F.
- Weibke, F., alloys of gallium and indium, I, 20.
- and Effinger, I., electrochemical studies on the system silver-antimony, I, 317. Structure of alloys in the system silver-antimony, I, 317.
- and Frey, E., reaction of aluminium with siliceous slags, I, 217.
- and Hesse, E., replaceability of mercury by gallium in dental stoppings, I, 318.
- and Quadt, U. F., heats of formation and states of order in the system gold-copper, I, 20.
- Weichert, C. K., experimental shortening of delayed pregnancy in albino rat, III, 738.
- Weichsel, H. S., intravenous calcium in peripheral occlusive vascular disease, III, 710.
- Weichsel, M., and Lapin, J. H., detoxified antigen in treatment of pertussis, III, 605.
- See also Cohen, P., and Lapin, J. H.
- Weichselbaum, T. E., Somogyi, M., and Rusk, H. A., determination of small amounts of potassium, I, 173.
- Weicker, B., and Retzlaff, L., experimental myocarditis from tonsillar cultures, III, 14.
- Weidel, W. See Butenandt, A.
- Weidenhagen, R., and Wegner, H. [with Lung, K. H., and Nordström, L.], action of diazonium salts with ascorbic acid; general reaction of dienols, II, 66.
- Weidenreich, F., external tubercle of human tuber calcanei, III, 781.
- Weidinger, A., chemical structure in the protein series, II, 239.
- and Pelsler, H., mechanism of water adsorption in gelatin gel, I, 113.
- See also Heringa, G. C., and Leyns, W. F.
- Weidlich, H. A., and Meyer-Delius, M., preparation of substituted cyclopentanones. II, II, 92.
- Weigand, C. G., Eekler, C. R., and Chen, K. K., action and toxicity of vitamin-B₆ hydrochloride, III, 751.
- Weigert, F., vision and photochemistry of visual purple, III, 723.
- and Morton, J. W., photochemical studies on colour vision, III, 575.
- and Mottram, J. C., physico-chemical properties of 3:4-benzopyrone, II, 303.
- Weigle, J. See Austin, J. B.
- Weihe, H. D., and Phillips, Max, hemicelluloses of wheat straw, III, 831.
- Weil, A., and Mayer, L. L., experimental retinoblastoma, III, 574.
- See also Hetherington, A. W., and Liebert, E.
- Weil, C. K., summer hay fever of unknown origin in south-east of U.S.A., III, 938.
- Weil, P. B. van, pancreatic necrosis, III, 626.
- Weil, P. G., and Browne, J. S. L., excretion of cortin after surgical operation, III, 409.
- Rose, B., and Browne, J. S. L., reduction of mortality from experimental traumatic shock with adrenal cortical substances, III, 727.
- See also Rose, B.
- Weil-Malherbe, H., enzymic phosphorylation of vitamin-B₆, III, 162. Mechanism of enzymic decarboxylation, III, 346. Synthesis of co-carboxylase, III, 765.
- See also Dickens, F., and Weiss, J.
- Weinberg, A. M., formal theory of nerve conduction, III, 888.
- Weinberg, E., inner surface of right ventricle, III, 463.
- Weinberg, M., and Guillaumie, M., preparation and properties of *perfringens* toxin; *Vibrio septique*, *histolyticus*, and *oedematis*; toxinogenesis in presence of sodium pyruvate and ascorbic acid, III, 267.
- Weinberger, L. M., and Grant, F. C., visual hallucinations and their neuro-optical correlates, III, 399.
- Weinberger, S. B. See Scudder, S. A.
- Weinrenn, M., encephalography with small quantities of air (Laruelle), III, 891.
- Weinbreun, C., osmotic values of leaf saps of South African high-veld grasses, III, 829.
- Weineck, E., influence of hydrolytic enzymes on viruses [of fowl plague and vaccinia], III, 773.
- Weiner, A. E. See Brues, A. M.
- Weiner, A. L., disseminated lupus erythematosus treated by sulphanilamide, III, 521. Pyoderma gangrenosum treated with sulphanilamide, III, 599.
- Weiner, N. See Michael, A.
- Weingarten, G., portable laboratory for the microscopist, I, 421.
- Weingrow, S. M. See Pigott, A. W.
- Weinhouse, S., and Hirsch, E. F., chemistry of atherosclerosis. I. Lipin and calcium content of intima and media of aorta with and without atherosclerosis, III, 385.
- Weinman, E. B., and Fralick, F. B., comparative study of benzedrine, parendrine, and cocaine with homatropine as cyclopegics, III, 396.
- Weinstein, A., response of acromegaly to deep X-ray therapy, III, 404.
- Weinstein, E. A., and Bender, M. B., dissociation of deep sensibility at levels of central nervous system, III, 716.
- Weinstein, L., prophylaxis of experimental anthrax infection with various hormone preparations, III, 206. Prophylaxis of experimental infections and intoxications with hormone preparations, III, 893.
- Weinstein, R. A. See Karelitz, S.
- Weinstein, R. E. See Salk, M. R.
- Weinstein, W., Plant, J., and Katz, L. N., limitations of use of digitalis for ambulatory patients with auricular fibrillation, III, 523.
- Weinstock, H. H., jun., Arnold, A., May, E. L., and Price, D., biological activity of synthetic pantothenic acid, III, 751.
- May, E. L., Arnold, A., and Price, D., amino-acid analogues of pantothenic acid, II, 325.
- See also Mitchell, H. K., and Williams, R. J.
- Weintraub, S., and Snow, W., X-ray appearances of soft structure in pregnancy, III, 621.
- Weir, E. G., determination of total chloride content of animals following administration of sodium bromide, III, 241.
- Weir, J. R. See McCalla, A. G.
- Weisblat, D. I. See Wolfrom, M. L.
- Weisengreen, H. H., and Sorsky, E. D., congenital hypoplasia of mandible, III, 622.
- Weiser, H. B., and Milligan, W. O., electrolyte coagulation process; influence of dilution of sol on adsorption of precipitating ions, I, 411.
- Milligan, W. O., and Coppoc, W. J., constitution of the alleged "Thiessen hydrates," I, 128.
- Weisman, D., and Russell, H., treatment of acute staphylococcal infections with sulphamethylthiazole, III, 920.
- Weiss, A. See Solomon, H. A.
- Weiss, C., and Westmeyer, H., simple manometer for the measurement of total pressure, I, 302.
- Weiss, F. T. See Jacobs, T. L.
- Weiss, H. D. See Hunter, F. R.
- Weiss, J., interaction of OH radicals and of similar free radicals, I, 368. Fluorescence and oxidation in conjugated ring systems, II, 247.
- and Weil-Malherbe, H., decomposition of hydrogen peroxide by catalase, I, 77.
- See also Carter, A. H.
- Weiss, K. See Bleyer, B.
- Weiss, P., functional properties of isolated spinal cord grafts in larval amphibians, III, 843.
- Weiss, S., and Parker, F., pyelonephritis its relations to vascular lesions and to arterial hypertension, III, 292.
- See also Kunkel, F., Leary, T., and Stead, E. A., jun.
- Weissberg, J. See Scherff, D.
- Weissberger, A. See Lane, J. F.
- Weissberger, L. H., increase in phospholipin and total phosphorus metabolism of kidney following administration of ammonium chloride, with radioactive phosphorus as indicator, III, 240.
- Weisschedel, E., and Jung, R., technique for exclusion of localised subcortical areas by means of electrocoagulation, III, 485.
- See also Jung, R.
- Weisskopf, V. F., Hartree approximation method for calculating nuclear energies, I, 342.
- and Ewing, D. H., yield of nuclear reactions with heavy elements, I, 187.
- Weissler, G. L., positive point-to-plane corona in pure argon, hydrogen, and nitrogen, I, 183.

- Weissman, S. I., and Freed, S., lattice vibrations of crystals and corresponding vibrations of their solutions, I, 192.
- See also Freed, S.
- Weitz, E., and Schmidt, F., production of colour during adsorption on superficially active materials; analogy between adsorptive action and complex formation, I, 109. Polarisation and change of colour during adsorption on superficially active substances, I, 158.
- Schmidt, F., and Singer, J., polarisation and colour changes due to adsorption on surface-active substances, III, I, 319.
- Weitzman, H. G. See Greenberg, D. M.
- Weizmann, A., zwitterion structures in unsaturated carbonyl compounds, I, 148. Zwitterion structures in organic molecules, I, 403.
- See also Bergmann, E.
- Weizmann, M., Bergmann, E., and Bograchov, E., synthesis of β -phenyl-naphthalene derivatives, II, 253.
- Weizsäcker, C. F. von, second law [of thermodynamics] and difference between past and future, I, 105.
- Welch, A. J. E. See Emeléus, H. J.
- Welch, C. S., and Broders, A. C., Golgi apparatus of thyroid gland, III, 725.
- See also Wakefield, E. G.
- Welch, H., and Hunter, A. C., determination of effect of antiseptics on phagocytosis, III, 541.
- Welch, J. F. See Crabtree, D. G.
- Welch, M. S. See Colowick, S. P.
- Welch, S. H., and Martin, H. F., pneumococcus (type III) meningitis with recovery [treated with sulphanimide], III, 59.
- Welch, W. B., water relations in *Bryophyllum calycinum* subjected to severe drying, III, 939.
- Weld, C. B., pneumothorax gases, III, 19.
- and Sieniewicz, T. M., spontaneous pneumothorax and pleural gases, III, 388.
- Welford, G. See Britton, H. T. S.
- Welge, H. J., absorption of carbon dioxide in aqueous alkalis, I, 364.
- Welin, S., deglutition anomaly simulating hypopharyngeal cancer, III, 309.
- Welker, W. H. See Hektoen, L., and Mann, L. S.
- Weller, G. See Binet, L.
- Weller, R. See Middlehurst, D.
- Wells, A. F., complexes in crystals, I, 387.
- See also Powell, H. M.
- Wells, A. H., preparation of pathologic specimens, III, 698.
- Wells, B. B., influence of adrenal cortex compounds on gluconeogenesis, III, 807.
- and Chapman, A., influence of pituitary, adrenal, and thyroid on gluconeogenesis in phloridzin diabetes, III, 847.
- and Kendall, E. C., effect of compounds from adrenal cortex on adrenal and thymus glands of rats, III, 806.
- Influence of corticosterone and compound E on somatic growth, III, 807.
- Influence of adrenal and thyroid on gluconeogenesis in phloridzin diabetes, III, 807.
- Influence of adrenal cortex in phloridzin diabetes, III, 895.
- Wells, C. See Rhines, F. N.
- Wells, G. P., intermittent activity in polychaete worms, III, 315.
- Wells, H. G., adipose tissue, III, 852.
- Occurrence and significance of congenital malignant neoplasms, III, 855.
- Wells, H. S. See Little, J. M.
- Wells, J. A. See Nelson, D.
- Wells, L. J., and Zalesky, M., effects of low environmental temperature on reproductive organs of male mammals with annual aspermia, III, 733.
- See also Harsh, R.
- Wells, R. C. See Wentworth, C. K.
- Wells, W. A., practical considerations with regard to hearing tests, III, 723.
- Wells, W. H. See Haxby, R. O.
- Wels, P., thiol content of skin and its catalytic action under the influence of light, III, 504.
- Irradiated cell nucleus, III, 555.
- Welsch, H., polymerisation of water and mutarotation of glucose, I, 443.
- Welsch, M., inactivation of bacteriolytic principle of *Actinomyces* by ultra-violet light, III, 262.
- Demelenne-Jaminon, G., and Thibaut, J., use of the gelose extract of blood clot-potassium tellurite medium for bacteriological diagnosis of diphtheria, III, 612.
- and Thibaut, J., simple medium for distinguishing the three types of *Corynebacterium diphtheriae* (gelose extract from blood clot-potassium tellurite), III, 611.
- Morphological and biochemical characters of human corynebacteria, III, 612.
- See also Gratia, A.
- Welsh, C. E. See Hennion, G. F.
- Weltz, G. A., motility of gastro-intestinal tract in man as observed in plane-kymograms, III, 414.
- Wendel, N. M. See Wendel, W. B.
- Wendel, W. B., Wendel, N. M., and Cox, W. W., methemoglobin as principal abnormal pigment in human blood showing cyanosis from sulphanimide, III, 246.
- Wendler, N. L. See Tishler, M.
- Wendt, G. See Anhangen, E., and Kuhn, R.
- Wenger, J. C. See West, F. V.
- Wenger, P., and Masset, E., micro-determination of cadmium by means of anthranilic acid, I, 174.
- Wenk, M., protein requirements in diet of athletes, III, 672.
- See also Zeller, E. A.
- Wenk, P., point heating in high-frequency alternating fields, III, 258.
- Wenk, W. See Wehrli, M.
- Wenner, R., clinical use of stilbene preparations, III, 656.
- Action of anhydro-hydroxyprogesterone, III, 904.
- and Joel, K., effect of stilbæstrol on menstruation, III, 31.
- Wenning, H. See Wizinger, R.
- Wense, T., chemistry of snake venom; comparison with saponin, III, 140.
- Histamine and scalding, III, 925.
- and Granzner, O., adrenal cortex and sodium chloride in infection and intestinal obstruction, III, 579.
- Went, F. W., pea test for auxin, III, 82.
- Bud growth, III, 174.
- Dual effect of auxin on root formation, III, 174.
- Auxin effects. I. and II., III, 271.
- Case of correlative growth inhibition in plants, III, 460.
- Transport of inorganic ions in polar plant tissues, III, 545.
- Wentworth, C. K., Wells, R. C., and Allen, V. T., ceramic clay in Hawaii, I, 240.
- Wentworth, J. H., Smith, P. K., and Gardner, W. U., composition of bones of mice receiving oestrogen and androgens, III, 654.
- Wenzel, J. S. See Cleghorn, R. A.
- Werch, S. C., micro-diffusion method for determination of acetone, III, 550.
- and Ivy, A. C., fate of ingested pectin, III, 917.
- Werder, F. von, derivatives of coumarin-3-carboxylic acid; a new class of synthetic medicinal, II, 379.
- Wergin, W., direct observation of structural elements of size 0.2 μ . in plant cell walls, III, 461.
- Direct observation of structural elements of size 0.2 μ . in the plant cell wall, III, 461.
- See also Hess, K.
- Werkman, C. H. See Andersen, A. A., Mickelson, M. N., Reynolds, H., Wiggert, W. P., and Wood, H. G.
- Werle, E., Madlener, M. J., and Herrmann, H., histidinecarboxylase and histaminase in kidney disease. I., III, 138.
- Wermuth, E. G., anastomoses between rectal and uterine veins, III, 1.
- Werner, A. A., Lewald, J., Johns, G. A., and Kelling, D., growth in children with mongolism, III, 178.
- Werner, H., and Kleinzeller, A., glycolysis of erythrocytes during tumour growth, III, 671.
- See also Strauss, A.
- Werner, K. H., influence of protein in wheat and rye flour (65—70% milling) and of 50% mixtures of these proteins on basal metabolism, III, 432.
- Wernig, H., conditions for success of the Voges-Proskauer reaction; *Aerogenes* bacilli in eystopyelitis, III, 768.
- Wernimont, G., and Hopkinson, F. J., micro-titration of selenium as applied to abnormal amounts of selenium in urine, III, 780.
- Wertenstein, L., radioactive gases evolved in uranium fission, I, 90.
- Wertheim, M. See Meyer, K. H.
- Wertheimer, E. See Mirski, A., and Sadovsky, A.
- Weschky, L. See Langenbeck, W.
- Wesenberg, H. See Nowotny, H.
- Wessel, F., and Keszler, M., bromometric determination of allyl compounds, II, 319.
- Wessely, E., relationship between disturbances of metabolism and oto-rhinolaryngology, III, 206.
- Wessely, F. von, and Wang, S., new type of natural quinone colouring matter of the phenanthrofurane class, II, 286.
- Wesson, L. G., loss of carbohydrate metabolism factor during boiling of vegetables, III, 821.
- West, C. See Kidd, F.
- West, E., and Fevold, H. L., comparison of interstitial cell-stimulating, ovary-stimulating, and inhibiting actions of pituitary glands of different species, III, 847.
- West, E. S., Christensen, B. E., and Rinehart, R. E., micro-determination of carbon dioxide in blood and other fluids, III, 369.
- Montague, J. R., and Judy, F. R., digestion and absorption in man with 3 feet of small intestine, III, 38.
- West, F. V., and Wenger, J. C., vitamin-C content of certified milk at time of consumption, III, 145.

- West, H. D., detoxication of diphenyl through a sulphur mechanism, III, 596.
- West, H. F. See Grishaw, W. H.
- West, L. E., and Robinson, R. J., vacuum-tube voltmeter; application to potentiometric precipitation titrations, I, 395.
- West, P. M., excretion of thiamin and biotin by the roots of higher plants, III, 270.
- and Wilson, P. W., biotin as growth-stimulant for root-nodule bacteria, III, 539.
- West, P. W., and Smith, L., field and laboratory micro-analysis by means of a portable drop reaction kit, I, 377.
- West, T. F., application of the diene synthesis to terpenoid compounds; eucarvone and maleic anhydride, II, 351.
- See also Goodway, N. F.
- Westbrook, W. H. L., and Tower, S., emergent fibres in posterior roots, III, 889.
- Westenbrink, H. G. K., determination of cocarboxylase and aneurin by a micro-modification of Ochoa and Peters' method, III, 533.
- and Dorp, D. A. van, cause of "activation" of carboxylase system by free aneurin, III, 533.
- and Goudsmit, J., aneurin excretion after injection of cocarboxylase, III, 428.
- Westenhoeffer, O. See Robbers, H.
- Westerbeke, D. See Anderson, Ernest.
- Westerfield, W. W., inactivation of oestrone, III, 652. Ineffectiveness of oestrogens in preventing polyneuritis, III, 654.
- Westergaard, B., stereoscopic measurement of female pelvis and foetal skull, III, 277.
- Westerman, H. H., blood supply of linea alba, II, 371.
- Westfall, B. B., and Smith, M. I., distribution of selenium in plasma- and liver-proteins and its fractionation in tryptic liver digests, III, 909.
- Westhaver, J. W., and Brewer, A. K., efficiency of thermal diffusion process for separating isotopes, I, 302.
- Westheimer, F. H., electrostatic influence of substituents on reaction rates. II, I, 415.
- and Shookhoff, M. W., electrostatic influence of substituents on reaction rates. I, I, 222.
- Westin, S., analysis of the angular distribution curve of elastically scattered electrons in a spherically symmetrical atomic field, I, 425.
- Westman, A., maintenance of corpus luteum function in women by oestrogenic substances, III, 654. Differential diagnosis in diseases with virilism, III, 895.
- Westmeyer, H. See Weiss, C.
- Westoll, T. S. See Parrington, F. R.
- Weston, A. W. See Suter, C. M.
- Weston, J. C. See Bates, L. F.
- Westphal, U., and Buxton, C. L., failure to recover pregnanediol glycuronide in monkeys, rabbits, and cats, III, 658.
- See also Leatham, J. H.
- Weszprémy, B. See Bodnár, J.
- Wetroff, G. See Moureu, H.
- Wetterer, G., quartz fibre manometer of high accuracy and simplicity, I, 177.
- Wettstein, A. [with Frey, Hugo], steroids. XXIV. $\Delta^{4,5}$ -3-ketones of the androstane and pregnane series, II, 180.
- See also Miescher, K.
- Wetzel, J. O., and Moore, L. A., blindness in cattle due to papilloedema; autopsy report on six cases, III, 640.
- Wetzel, U., and Watz, M., use of blood transfusion in medicine, III, 378.
- Weve, H. J., origin and treatment of detachment of retina, III, 398.
- Weyand, L. See Bock, H. E.
- Weyde, E., and Wicke, E., shape of sorption surfaces for adsorption and desorption under various conditions, I, 207.
- Weyeneth, R., action of mandelic acid in urinary infections, III, 247.
- Weygand, C., benzidine; m.p. study, II, 340.
- and Gabler, R., retardation of the development of an ordered structure between ordinary and crystalline liquids and between different types of the latter, I, 14.
- Weygand, F., preparation of *N*-glycosides of aniline and substituted anilines, II, 69.
- and Birkofer, L., preparation of "old" yellow enzyme from yeast, III, 344.
- Weyraueh, H. M., anomalies of renal rotation, III, 464.
- Whalen, D. See Loofbourow, J. R.
- Whalley, W. B. See McGookin, A.
- Wharton, J. D. See Huggins, C.
- Wheat, J. A., and Browne, A. W., chlorinates. III. Temperature-concentration equilibria in the systems methylene chloride-chlorine and methyl chloride-chlorine; methylene and methyl perchlorides. IV. Temperature-concentration equilibria in the system hydrogen chloride-chlorine; hydrogen perchlorides, I, 360.
- Wheeler, C. H. See Stewart, H. J.
- Wheeler, D., and Spencer, E. W., planigraphy, III, 832.
- Wheeler, D. H., Riemenschneider, R. W., and Sando, C. E., preparation, properties, and thiocyanogen absorption of triolein and trilinolein, II, 116.
- Wheeler, J. A., and Cannon, C. V., rotational transition in solid methane, I, 348.
- See also Bohr, N.
- Wheeler, K. M. See Stuart, C. A.
- Wheeler, M. A., paramagnetic susceptibility of copper-nickel and zinc-nickel alloys, I, 66.
- Wheeler, T. S. See Acharya, B. G., Kaplash, B. N., Shenoi, R. B., and Virkar, V. V.
- Wheeler, W. R. See Whitmore, F. C.
- Wheelon, H., reverse or paradoxical blood-sugar response to ingested glucose, III, 675.
- Wheland, G. W., and Danish, A. A., steric inhibition of resonance in aromatic nitro-compounds, II, 270.
- Whelden, R. M., Buchwald, C. E., Cooper, F. S., and Haskins, C. P., electron bombardment of biological materials. II. Rate of death of fungus spores bombarded in vacuum with cathode-ray beams from 4–15 kv, III, 530.
- See also Buchwald, C. E.
- Whetstone, J. See Peat, S.
- Whidden, H. L. See Friedgood, H. B.
- Whillis, J., development of synovial joints, III, 178.
- Whipple, A. O., medical-surgical splenopathies, III, 788.
- See also Mackenzie, D. W., jun.
- Whipple, F. L. See Payne-Gaposchkin, C.
- Whipple, G. E. See Ray, J. D.
- Whipple, G. H., and Robschey-Robbins, F. S., amino-acids and haemoglobin production in anaemia, III, 703.
- See also Hahn, P. F., Madden, S. C., Miller, L. L., and Robschey-Robbins, F. S.
- Whiston, G. C., histological study of growing avian femur following experimental dislocation of hip, III, 782.
- Whitaker, D. M., effects of ultra-centrifuging and of pH on development of *Fucus* eggs, III, 624.
- Whitaker, J. S. See Whitmore, F. C.
- Whitaker, M. D., Bright, W. C., and Murphy, E. J., transmission of neutrons of different energies through quartz crystals, I, 186.
- See also Beyer, H. G., and Murphy, E. J.
- Whitaker, W. D. See Plant, S. G. P.
- Whitby, L. E. H., biological aspect of infected wounds, III, 678.
- See also Bushby, S. R. M.
- Whitaker, W. J. See Kohler, E. P.
- Whitcomb, B. B. See Thompson, K. W.
- Whitcomb, S. E., Nielsen, H. H., and Thomas, L. H., normal vibrations of chains of similar and similarly situated dynamical systems and the infra-red spectrum of undecane, I, 194.
- White, A., and Lavin, G. I., ultra-violet absorption spectrum of prolactin, III, 405.
- and White, Julius, effect of single intraperitoneal injections of carcinogenic and non-carcinogenic hydrocarbons on growth of rat, III, 588.
- See also Bonsnes, R. W., Shipley, R. A., Stevenson, E. S., and White, Julius.
- White, A. B., characteristics of the copper arc in air, I, 381.
- White, A. H., Biggs, B. S., and Morgan, S. O., dielectric evidence of molecular rotation in the crystals of benzene derivatives, I, 98.
- and Bishop, W. S., dielectric evidence of molecular rotation in the crystals of non-aromatic compounds, I, 98.
- White, C. E., and Lowe, C. S., determination of aluminium by photometric fluorescence measurement, I, 300.
- White, C. J. See Wardlaw, H. S. H.
- White, C. M., electrode potential of crystal surfaces of metals, II, I, 257.
- White, C. T. See Legg, J.
- White, D. E., and Sampson, E., high-temperature, intermediate-pressure molybdenite deposit at Rencontre East, Newfoundland, I, 398.
- See also Trikojus, V. M.
- White, E. C., bactericidal filtrates from a mould culture, III, 868.
- White, F. W., Deutsch, E., and Maddock, S., comparative value of serial hippuric acid excretion, total cholesterol, cholesterol ester, and phospholipin tests in liver diseases. II. Clinical comparison of tests, III, 502.
- Deutsch, E., Maddock, S., Downing, V., and Jensen, D., comparative value of serial hippuric acid excretion, total cholesterol, cholesterol ester, and phospholipin tests in diseases of liver. I. Results of tests, III, 311.
- White, H. J., peptone-dextrose broth in studies of anti-bacterial activity, III, 541.
- and Parker, J. M., bactericidal effect of sulphanilamide on β -haemolytic streptococci *in vitro*, III, 936.
- See also Bratton, A. C., and Litchfield, J. T., jun.

- White, H. L., absence of glomerular intermittence in normal dogs and rabbits, III, 418.
- Findley, T., jun., and Edwards, J. C., interpretation of diodrast clearances in man, III, 503.
- and Heinbecker, P., interpretation of diodrast clearances in the dog, III, 503.
- and Rolf, D., rapid micro-method for determining diodrast and inorganic iodide-iodine in blood and urine, III, 503.
- White, James. See Grieve, J.
- White, Julius, and White, A., inhibition of growth of rats by oral administration of methylcholanthrene, benzpyrene, or pyrene and the effects of various dietary supplements, III, 141.
- See also White, A.
- White, J. C., drainage of the third ventricle by transfrontal approach in obstructive hydrocephalus, III, 113.
- White, J. U., spectroscopic measurements of gaseous CN. I. Dissociation in the electric discharge. II. Thermal dissociation of cyanogen, I, 92, 343.
- White, J. W., and Plyler, E. K., infra-red absorption of mixtures of phenol and ethyl alcohol, I, 386.
- White, J. W., jun. See Zscheile, F. P.
- White, M. G. See Barkas, W. H., and Crütz, E. C.
- White, M. J. D., origin and evolution of multiple sex-chromosome mechanisms, III, 700. Heteropycnosis of sex chromosomes and its inheritance in terms of spiral structure, III, 837. Evidence for polyploidy in hermaphrodite groups of animals, III, 875.
- White, M. M., oestrogen for non-patent Fallopian tubes, III, 581.
- White, P., Titus, R. S., Joslin, E. P., and Hunt, H., prediction and prevention of late pregnancy accidents in diabetes, III, 307.
- White, P. B., characteristic hapten and antigen of rugose races of cholera and El Tor vibrios, III, 267. Heat-labile somatic protein antigen (H.L.S.P.) of vibrios, III, 267.
- White, P. D. See Comean, W. J., Kelson, S. R., and Spillane, J. D.
- White, R. See Marvel, C. S.
- White, R. M. See Troup, A. G.
- White, T., linkage and crossing-over in human sex chromosomes, III, 875.
- White, Theodore, amino-sugars. II. Action of dilute alkali on *N*-acylglucosamines, II, 207.
- White, W. C. See Roberts, J. L.
- Whitehead, H. See Lewis, J. R.
- Whitehead, H. R., and Hunter, G. J. E., bacteriophage-organism relationships in lactic streptococci, III, 171.
- See also Hunter, G. J. E.
- Whitehead, R. L. S. D. See Bell, R. F.
- Whitehead, R. W., Neuburger, K. T., Rutledge, E. K., and Silcott, W. L., pharmacological and pathological effects of repeated convulsant doses of metrazol, III, 442.
- Whitehead, S. See Austen, A. E. W.
- Whitehead, W. See Robertson, G. J.
- Whiteside, B., effect of thyrotropic hormone on pregnant rabbits, III, 404.
- Whitford, A. E. See Stebbins, J.
- Whiting, G. C. See Boswell, J. G.
- Whitmer, R. M., transformations of matter-radiation gas mixtures, I, 202.
- Whitmore, E. J. See Thirsk, H. R.
- Whitmore, F. C., Fenske, M. R., Quiggle, D., Bernstein, H., Carney, T. P., Lawroski, S., Popkin, A. H., Wagner, R. B., Wheeler, W. R., and Whitaker, J. S., attempted separation of isomeric hexenes by fractional distillation, II, 201.
- and Surmatis, J. D., physical constants of pentanol-3, I, 247. Physical constants of pentan- γ -ol, II, 202.
- Whitmore, W. F., and Revukas, A. J., quantitative hydrogenation of substituted azo-compounds in presence of Raney nickel at normal temperature and pressure, II, 304.
- Whitnall, S. B., and Norman, R. M., microphthalmia and visual pathways, III, 491.
- Whitney, A. G. See Smith, L. I.
- Whitney, R. See Burdick, H. O.
- Whitney, R. J., thermal resistance of mayfly nymphs from ponds and streams, III, 139.
- Whitney, W. R. See Henze, H. R.
- Whitrow, G. J., kinematical relativity and the geological time-scale, I, 45.
- Whittaker, J. See Selye, H.
- Whittaker, N. See Maizels, M.
- Whittemore, W. L., Royster, C. L., and Riedel, P. A., intravenous and rectal administration of sulphapyridine, III, 599.
- Whitten, L. K. See Gordon, H. McL.
- Whittick, J. W. See Innes, J. R. M.
- Whittingham, H. E., anaphylaxis after tetanus toxoid, III, 542.
- Whittleston, W. G., simply constructed vacuum oven, I, 234. Apparatus for drying small quantities of heat-sensitive solids, I, 234.
- Whytlaw-Gray, R. See Baxter, G. P., and Hartley, G. A. R.
- Wibaut, J. P., [substitution of thiazole], II, 110.
- Bickel, A. F., and Brandon, L., reactivity of bromine atoms in brominated pyridines; formation of 4-bromo-2,6-diaminopyridine by action of ammonia on 2:4:6-tribromopyridine, II, 104.
- Haayman, P. W., and Dijk, J. van, reactivity of bromine atoms in brominated pyridines; formation of 6-bromo-2-hydroxypyridine by acid hydrolysis of 2:6-dibromopyridine, II, 188.
- Overhoff, J., and Gratama, K., octadeca-(per-)chloroquaterphenyl; preparation of deca-(per-)chlorodiphenyl, II, 210.
- Speckman, B. W., and Wagtendonk, H. M. van, reactivity of bromine atoms in brominated pyridines; formation of 6-bromo-1-methyl-2-pyridone from 2:6-dibromo-1-methylpyridinium salts, II, 104.
- See also Speckman, B. W.
- Wick, A. N. See Barries, R. H., Clark, W. G., and Mackay, E. M.
- Wick, (Miss) F. G., effect of temperature and exposure to X-rays on triboluminescence, I, 58.
- and Vincent, (Miss) M. S., luminescence excited by exposure to neutrons, I, 430.
- Wick, G. C. See Ageno, M.
- Wick, H. J. See Leighty, J. A.
- Wicke, E. See Weyde, E.
- Widdowson, E. M. See McCance, R. A.
- Widenbauer, F., cocarboxylase content of human blood, III, 472. Chemical determination of vitamin-B₁₂ and cocarboxylase in organs, III, 857.
- Wideman, A. H. See Dannenberg, A. M.
- Widiger, A. H. See Brown, W. G.
- Widmark, E. M. P., presence of cancer-producing substances in roasted food, III, 44.
- Wiebe, R., and Gaddy, V. L., solubility of carbon dioxide in water at various temperatures from 12° to 40° and at pressures to 500 atmospheres; critical phenomena, I, 251.
- Wiechmann, E., tests of cardiac function, III, 383.
- Wieczorowski, E. See Gray, J. S.
- Wiedmann, H. See Fricke, R.
- Wiegand, C. J. W. See Sondern, C. W.
- Wiese, E. See Huggins, C.
- Wiegand, (Miss) C. W. See Fieser, L. F.
- Wieland, H., Koschara, W., Dane, E., Renz, J., Schwarze, W., and Linde, W., *Lobelia* alkaloids. VII. Accessory alkaloids of *Lobelia inflata*, II, 293.
- Probst, O., Walch, H., Schwarze, W., and Ranch, K., mechanism of oxidation processes. LI. Enzymic decomposition of pyruvic and oxalacetic acid, III, 240.
- and Tartter, A., wing-pigments of butterflies. V. Degradation of deiminoleucopterin, II, 236.
- and Witkop, B., *Amanita* toxins. V. Constitution of phalloidine, II, 233.
- See also Schmitt, W.
- Wiele, G., and Ibeling, H., serum treatment of pneumonia, III, 919.
- Wien, N. A. See Freilich, E. B.
- Wien, R., toxicity of *p*-chloro-*m*-cresol and of phenylmercuric nitrate, III, 438.
- See also Bruce, H. M.
- Wien, S. van, Leland refractor; method for refraction under binocular conditions, III, 395.
- Wiener, A. S., and Derby, I. M., syphilitic reagin in blood and spinal fluid, III, 266.
- and Peters, H. R., haemolytic reactions following transfusions of blood of homologous group with three cases in which same agglutinin was responsible, III, 788.
- and Silverman, I. J., permeability of human placenta to antibodies; quantitative study, III, 307.
- See also Landsteiner, K.
- Wiener, H. J. See Fabrykant, M.
- Wiener, K., vaginal melanosis caused by bismuth therapy and carcinoma of the cervix, III, 864.
- Wiener, M., surgical experiment in changing refraction of eye, III, 488.
- Wiersma, C. A. G., innervation of walking legs of crab *Eriocheir sinensis*, III, 391.
- Wiersma, E. C. See De Haas, W. J.
- Wierzchowski, P. See Kleczkowski, A.
- Wiesbrock, H. See Winkler, A.
- Wiesel, B. H. See Kremer, D. N.
- Wiesener, E. H., relation between thyroxine, prolactin, progynon, and vitamins, III, 640.
- Wiest, E. G. See Henne, A. L.
- Wieters, H. See Moll, T.
- Wigby, P. E. See Metz, M. H.
- Wiggers, C. J., pathways of medical progress, III, 744.
- and Węgrin, R., ventricular fibrillation due to single, localised induction and condenser shocks applied during vulnerable phase of ventricular systole, III, 563.

- Wiggers, C. J. See also Boyer, N. H., and Wright, G. W.
- Wiggert, W. P., Silverman, M., Utter, M. F., and Werkman, C. H., preparation of an active juice from bacteria, III, 768.
- Wiggins, C. G. See Borsook, H.
- Wigglesworth, V. B., source of moulting hormone in *Rhodnius* (Hemiptera), III, 120.
- Wigner, E. See Margenau, H.
- Wigodsky, H. S., Bussabarger, R. A., and Fogelson, S. J., effect of gastric mucin on haemoglobin regeneration in anemic dogs, III, 8.
- and Greene, R. R., effect of testosterone, oestron, and oestradiol applied to penis of rat, III, 734.
- See also Bussabarger, R. A.
- Wigton, R. S. See Masland, R. L.
- Wiig, F. O. See DuBridge, L. A., Janneck, W. H., and Liberatore, L. C.
- Wijk, A. M. van, and Patterson, H. S., particles of different sizes removed from dust-laden air by breathing, III, 445.
- Wijk, W. van. See Liempt, J. A. M. van.
- Wijk, W. R. van, Veen, J. H. van der, Brinkman, H. C., and Seeder, W. A., influence of temperature and specific volume on viscosity of liquids, III, I, 106.
- Wikoff, H. See Hemingway, A.
- Wikoff, H. L., Brunner, R. A., and Allison, H. W., bromine content of blood of healthy individuals, III, 559.
- Cohen, B. R., and Grossman, M. I., production of low temperatures, I, 234.
- and Vincent, J. P., effect of high-fat diet on carbon dioxide-combining power of blood plasma, III, 296.
- Wiksw, J. P. See Briggs, T. R.
- Wilbar, C. L., new carbohydrate for prevention of nutritional anaemia in infants, III, 89.
- Wilber, I. E., human cyclopia with associated ocular anomalies, III, 114.
- Wilbrandt, R. See Wilbrandt, W.
- Wilbrandt, W., analysis of metabolism with gas interferometer, III, 516.
- Wilbrandt, R., and Steinmann, B., gas exchange during ascent to high altitudes, III, 478.
- Wilbur, D. L., effects of vitamin deficiency on gastro-intestinal tract, III, 320.
- See also Noth, P. H.
- Wilcox, A. See Michelson, L., and Roe, M. A.
- Wilcox, H. B., jun. See Segal, B. C.
- Wilcox, L. V., determination of boron in plant material, III, 694.
- Wilcoxon, F. See Zimmerman, P. W.
- Wild, F. See Kipping, F. B.
- Wildbolz, E., [clinical indications for] denervation of the kidneys, III, 223.
- Wilde, W. S. See Ashman, R., and Fenn, W. O.
- Wilder, R. M., treatment of Addison's disease, III, 807. Sensitivity to pain, III, 889.
- Browne, H. C., and Butt, H. R., diseases of metabolism and nutrition, III, 518.
- See also Regan, J. F., and Ricketts, H. T.
- Wildhack, W. A., proton-deuteron transformation as a source of energy in dense stars, I, 143.
- Wilding, J. L., oxygen threshold for three species of fish, III, 388.
- Wildman, A. E., and Carter, H. B., fibre-follicle terminology in mammalia, III, 86.
- Wilds, A. L. See Bachmann, W. E.
- Wildt, R., negative ions of hydrogen and opacity of stellar atmospheres, I, 137.
- Wile, U. J., and Benson, J. A., exfoliative dermatitis due to phenobarbital with fatal outcome, III, 760.
- Snow, J. S., and Bradbury, J. T., sex hormones in aone. I. Urinary excretion of oestrogen. II. Urinary excretion of androgenic and oestrogenic substances, III, 33.
- Willen, B. See Bensley, E. H.
- Wilens, S. L., relation of elastic tissue in root of aorta to aortic valve, III, 833.
- Wilensky, A. O., occurrence, distribution, and pathogenesis of liver death and hepato-renal syndrome, III, 220.
- Wilgus, H. S., jun., and Patton, A. R., availability of manganese in avian digestion, III, 38. Factors affecting manganese utilisation in the chicken, III, 49.
- Wilhelm, H. See Steinkopf, W.
- Wilhelm, J. O. See Elson, R. G.
- Wilhelmi, A. E. See Fisher, R. B.
- Wilhelmj, C. M., and Finegan, R. W., gastric secretory curve before and after Mann-Williamson operation, and its bearing on normal regulation of gastric acidity, III, 35.
- Finegan, R. W., and Baca, D. E., characteristics of experimentally produced anomalies of gastric secretory curve, III, 34.
- and Sachs, A., physiological control of normal human gastric secretory curve, III, 35. Characteristics of the normal human gastric secretory curve, using improved gastric test meal, III, 218.
- See also Slutsky, B.
- Wilhelmy, E. W. See Kyger, E. R., jun.
- Wilke, F. See Meesman, A.
- Wilkinson, V. A., chemistry of human skin. IV. Electrokinetic effect of various ions on suspended particles of stratum corneum, III, 139.
- Wilkie, J., fluorine osteosclerosis, III, 928.
- Wilkins, C. J., reduction of nitrosylsulphuric acid by sulphur monoxide, I, 418.
- Wilkins, L., thyroid medication in childhood, III, 805.
- Fleischmann, W., and Howard, J. E., macrogenitosomia praecox associated with hyperplasia of androgenic tissue of the adrenal and death from cortico-adrenal insufficiency, III, 410.
- and Richter, C. P., salt craving in case of cortico-adrenal insufficiency, III, 579.
- Wilkins, T. R., response of photographic materials to atomic particles, I, 418. Excited states in stable nuclei, I, 426.
- and Crawford, D. P., cloud-chamber study of α -rays of actinouranium, I, 382.
- and Dempster, A. J., radioactive isotope of samarium, I, 382.
- Wilkins, W. H., and Patriok, S. H. M., ecology of the larger fungi. III. Constancy and frequency of grassland species with special reference to soil types, III, 545.
- Wilkinson, H. See Gridgeman, N. T., and Tainsh, P.
- Wilkinson, J. A. See Lineken, E. E.
- Wilkinson, J. F., and De Fremery, P., gonadotropic hormones in urine of giraffe, III, 900.
- Klein, L., Ashford, C. A., Jones, T. S. G., Mainwaring, B. R. S., and Aylward, F. X., excretion of anti-pernicious anaemia principle in urine, III, 557.
- See also Aylward, F. X., and Israëls, M. C. G.
- Wilkinson, R. See Hey, D. H.
- Wilkinson, S. See Ghosh, R.
- Wilks, R. A. C., decalcification fluid, III, 626.
- Willard, H. H., and Ayres, G. H., thermoelectric absorptiometer for analytical work, I, 375.
- Willard, J. E., chemical activation by isomeric radioactive transition; reaction of ^{80}Br (18 min. half-life) with carbon tetrachloride, I, 229.
- Willard, M. L., and Maresh, C., optical constants of benzamide, its homologues and aliphatic amides, II, 277.
- Willcox, J. S., influence of salt on nitrogen balance of hens, III, 143.
- Willems, J., oriented overgrowths of somatoids, I, 246.
- Willenegger, H., and Ottensooser, F., serological analysis of preserved blood, III, 878.
- Willenz, J. See Lane, J. F.
- Willer, R. See Ziegler, K.
- Willet, J. C. See Sulkin, S. E.
- Willfang, G. See Meerwein, H.
- Willi, H., physiology and pathology of the newborn, III, 42.
- Williams, A. E., white tantalite, I, 333.
- Williams, A. T., table of fundamental [spectrum] lines, I, 50.
- Williams, B. L., effect of injection of pituitary extract immediately after delivery, III, 302.
- Williams, C. E., and Battista, W. P., constant dust-feeding device for laboratory use, III, 605.
- Williams, C. H., new cardiac glycoside, III, 862.
- Williams, Denis, and Lennox, W. G., cerebral blood flow in hypertension, arteriosclerosis, and raised intracranial pressure, III, 16.
- See also Gibbs, F. A.
- Williams, Dudley, oscillation frequencies of nitrites, I, 8. Absorption of phenyl mustard oil in the 4.8 μ . region, I, 345. Optical properties of fluorite in the 6 μ . region, I, 397. Infra-red spectrum of potassium cyanate solutions, I, 429.
- and Taschek, R., device for controlling the temperature of absorption cells, I, 373.
- Williams, D. E., MacLeod, F. L., and Morrell, E., availability to white rats of phosphorus in *Lespedeza sericea* and lucerne hays, III, 511.
- Williams, D. J., abnormal cortical potentials associated with high intracranial pressure, III, 299.
- See also Nims, L. F.
- Williams, D. T., and Copeland, C. S., condenser for determination of dielectric constants of liquids, I, 235.
- Williams, E. F. See Chibnall, A. C.
- Williams, E. G., blood concentration in morphine addicts, III, 154.
- Williams, E. J., average number of electrons accompanying a cosmic-ray meson due to collisions of the meson with atomic electrons, I, 280. Multiple scattering of fast electrons and α -particles, and "curvature" of cloud tracks due to scattering, I, 399.
- and Evans, G. R., transformation of mesotrons into electrons, I, 341.
- and Roberts, G. E., evidence for transformation of mesotrons into electrons, I, 143.

- Williams, G., kinetics of the catalysed polymerisation of styrene. III. Mechanism of metal chloride catalysis, I, 365.
- Williams, G. C., electrophoresis of hydrocarbons and aliphatic esters as a function of pH, I, 440.
- Williams, H. G., and Hartgraves, T. A., germicidal properties of the oxides of nitrogen, III, 247.
- Williams, H. H. See Erickson, B. N.
- Williams, H. J., and Bozorth, R. M., magnetic anisotropy of nickel at 20° K., I, 14.
- Williams, H. L., and Watson, E. M., influence of thiol compounds on activity of bone-phosphatase *in vitro*, III, 826. See also Pastore, P. N.
- Williams, H. O. See Carter, F. D.
- Williams, H. S. See Trusler, H. M.
- Williams, I. G., epidermal tumours of skin, III, 913.
- Williams, J. H. See Allen, J. S.
- Williams, James H. See Roblin, R. O., jun.
- Williams, J. R., jun., Diaz, J. T., Burch, J. C., and Harrison, T. R., relation of adrenal glands to action of renal pressor substance, III, 192. and Harrison, T. R., clinical pictures associated with increased blood pressure, III, 386. See also Grollman, A.
- Williams, John Warren. See Lundgren, H. P., and Pappenheimer, A. M., jun.
- Williams, Jonathan W., and Hurd, C. D., apparatus for the laboratory preparation of keten and butadiene, II, 154. and Osborn, J. M., keten in the Friedel-Crafts reaction. I. Acetylation of aromatic hydrocarbons with keten, II, 90.
- Williams, L. R. See Twomey, A. C.
- Williams, M. B. See Bonner, W. D.
- Williams, M. M. D. See Dublin, W. B.
- Williams, P. C., effect of stilbcestrol on ovaries of hypophysectomised rats, III, 655. See also Rinderknecht, H.
- Williams, R. D., Mason, H. L., and Smith, B. F., induced vitamin-B₁ deficiency in human subjects, III, 857.
- Williams, Rice D., genetics of cyanogenesis in white clover (*Trifolium repens*), III, 81.
- Williams, R. G., living thyroid follicles in rabbit, III, 785.
- Williams, R. H. See Beach, E. F.
- Williams, R. J., Eakin, R. E., and Snell, E. E., relationship of inositol, thiamin, biotin, pantothenic acid, and vitamin-B₆ to the growth of yeasts, III, 686. and Major, R. T., structure of pantothenic acid, II, 203.
- Mitchell, H. K., Weinstock, H. H., jun., and Snell, E. E., pantothenic acid. VII. Partial and total synthesis, II, 299. See also Mitchell, H. K., Pennington, D., and Snell, E. E.
- Williams, R. T., detoxication. IV. Resolution of *dl*-isomethanol through conjugation with glucuronic acid in the rabbit. V. Preparation of *d*-glucurone from ammonium menthylglucuronate. VII. Biological reduction of *l*-menthone to *d*-neomenthol and of *d*-isomenthone to *d*-isomethanol in the rabbit; conjugation of *d*-neomenthol with glucuronic acid, II, 153, 242, 255. See also Shelswell, J.
- Williams, Sidney. See Peters, C. A.
- Williams, Stanley, Splatt, B., and Jakobowicz, R., concentration of sulph-anilamide in saliva following oral administration, III, 919. See also North, E. A.
- Williams, S. E., absorption of hydrogen Lyman radiation by atmospheric gases, I, 137.
- Williams, V. See Herman, R. C.
- Williams, W. E. See Drinkwater, J. W.
- Williams, W. L., and Cunningham, B., changes in rat testis following heat-treatment, III, 583. See also Hooker, C. W., and Van Heuverswyn, J.
- Williams, W. W. See Marvel, C. S.
- Williamson, R. R., comparison of electrical and diffusion forces in metabolism of electrolytes, III, 259.
- Williamson, S., and Green, D. E., co-enzyme I from yeast, III, 826.
- Williamson, W. O., reversible photosensitivity in artificial materials containing rutile, I, 333.
- Willis, H. B. See Gilman, H.
- Willis, (Miss) P. See Stücken, (Miss) H.
- Willis, R. A., ovarian teratoma containing cerebellar tissue, III, 126.
- Willis, T., [treatment of] erysipelas in infants [with sulph-anilamide], III, 242.
- Willison, A. M. See Lions, F.
- Willius, F. A., less common diagnostic pitfalls with reference to cardiac diseases, III, 793. Functional dyspnoea, III, 795. Plasma-lipins in coronary sclerosis and in normal states, III, 840. See also Dry, T. J., and Keys, T. E.
- Willmans, R. See Katzenelbogen, S.
- Willmer, E. N. See Trowell, O. A.
- Willstaedt, H., fungus pigments. IV. Constitution of lactarovioline, II, 185. Vitamin-B complex, III, 593.
- Willstätter, R., and Rohdewald, M., enzymic transformation of sugar in muscle, III, 479.
- Wilman, H., structure and orientation of silver halides, I, 287.
- Wilmer, H. A., quantitative growth of skin and subcutaneous tissue in relation to human surface area, III, 621. Changes in structural components of human body from six [fetal] months to maturity, III, 834.
- Willson, A. J. See Innes, J. R. M.
- Wilska, A., stimulating apparatus for physiological experiments, III, 462. and Varjoranta, K., velocity of action potentials in skeletal muscle fibres at various degrees of stretch, III, 390. Effect of temperature changes on conduction of action potentials in muscle, III, 390.
- Wilson, A., effect of vitamin-B₁ on carbohydrate metabolism, III, 232.
- Wilson, A. H., and Booth, F., large cosmic-ray showers and mesons, I, 143. See also Booth, F.
- Wilson, A. J. C. See Lipson, H.
- Wilson, A. T., Kaely, D., and Cullen, G. E., relation of concentrations of free to conjugated sulphapyridine in blood of patients, III, 246.
- Wilson, C. See Page, B. H.
- Wilson, C. L., sensitive test for iodide and nitrite, I, 299. Lantern demonstration of a rotating-vibrating diatomic molecule, I, 378. See also Wilson, David W.
- Wilson, C. V. See Allen, C. F. H.
- Wilson, D. A., and Strickler, H. S., constant-level still for re-distillation of water, I, 84. See also McBain, J. W.
- Wilson, D. C., distribution of fluorosis in India and England, III, 86. Vitamin-D₂ and -D₃ in osteomalacia, III, 820.
- Wilson, D. E. See Nigg, C.
- Wilson, D. M., Power, M. D., and Kepler, E. J., alkalosis and low plasma-potassium in case of Cushing's syndrome, III, 897.
- Wilson, D. S. P., treatment of incompletely descended testis, III, 308.
- Wilson, D. Wright. See Gurin, S.
- Wilson, David W., and Wilson, C. L., identification of halogen in organic [and inorganic] halogen compounds, II, 60.
- Wilson, E. See Bissonnette, T. H.
- Wilson, E. B., jun., expanded secular equation for vibration frequencies of a molecule, I, 11. Partition functions for partly classical systems, I, 18.
- Wilson, E. J., jun. See Pacsu, E.
- Wilson, F. H., spring clips for "all glass" blood counting chambers, III, 838.
- Wilson, F. J. See Little, A. J.
- Wilson, G., heart in heat stroke, III, 383.
- Wilson, G. L., and Miles, F. D., partial pressures of nitric acid-water mixtures from 0° to 20°, I, 155. See also Miles, F. D.
- Wilson, G. S., and Maier, I., sulphapyridine in *Brucella abortus* infection, III, 331. Schwabacher, H., and Maier, I., effect of the desensitisation of tuberculous guinea-pigs, III, 254.
- Wilson, H. J. See Volker, J. F.
- Wilson, H. M., exploration of thorax by body-section roentgenography, III, 387. See also Dorfman, R. I.
- Wilson, H. S., removal of sulphur from laboratory glassware, I, 377.
- Wilson, J. See Freeman, G. G.
- Wilson, J. G., air cells in petrous temporal bone in a child of 13 years, III, 204.
- Wilson, J. G. (Manchester), scattering of mesotrons in metal plates, I, 142. See also Lovell, A. C. B.
- Wilson, J. Gordon. See Anson, B. J.
- Wilson, James G. See Boling, J. L.
- Wilson, J. L. See Carey, B. W.
- Wilson, J. M., mechanical respirator in poliomyelitis, III, 566.
- Wilson, (Miss) Jean M. See Robinson, R. A.
- Wilson, J. N., theory of chromatography, I, 370. and Dickinson, R. G., thermal and photochemical exchange reactions of bromine, I, 123.
- Wilson, J. S. See Brown, W. H.
- Wilson, L., action of testosterone propionate in case of endometriosis, III, 733. and Kurzrok, R., actions of oestradiol, progesterone, and testosterone on contractions of human uterus, III, 660. Uterine contractility in functional dysmenorrhoea, III, 737. Menstruation and endometrium, III, 738. See also Kurzrok, R.
- Wilson, L. D. See Sherrick, P.
- Wilson, O. C., intercomparison of doublet ratio and line intensity for interstellar sodium and calcium, I, 49.
- Wilson, P. W. See Hurwitz, C., and West, P. M.
- Wilson, R. B., Randall, L. M., and Osterberg, A. E., pregnanediol, III, 212.

- Wilson, R. H., and DeEds, F., effects of naringin and hesperidin on albino rats, III, 325. Experimental chronic cadmium poisoning, III, 336. Synergistic action of thyroid on fluorine toxicity, III, 726.
See also DeEds, F.
- Wilson, S. D., and Chang, C. T., ephedrine. III. Di- β -methylamino- α -hydroxypropylbenzenes, II, 170.
and Cheng, Y. Y., Friedel-Crafts reaction. II. Condensation of *o*- and *m*-dichlorobenzene with chloroform and carbon tetrachloride, II, 248.
See also Kung, L. C.
- Wilson, S. H., spectrographic analysis. I. Equipment, technique, and applications of spectrographic analysis in the [New Zealand] Dominion laboratory, I, 330.
- Wilson, S. J., prothrombin and hippuric acid determinations as indicators of liver damage, III, 40. Quantitative studies on anti-thrombin, III, 706. Quantitative prothrombin and hippuric acid determinations as sensitive reflectors of liver damage in human subjects, III, 909.
and Doan, C. A., pathogenesis of hæmorrhage in artificially induced fever, III, 705.
See also Wiseman, B. K.
- Wilson, T. C., β - β transformation in lithium-lead alloys, I, 155.
- Wilson, V. C., nature of cosmic rays below ground, I, 189.
See also Schein, M.
- Wilson, W. E. See Wortis, H.
- Wilson, W. J. See Haworth, W. N.
- Wilson, W. K. See Mason, C. M.
- Winans, C. F., nickel as catalyst for hydrogenation of aromatic halogen compounds, II, 73. Hydrogenation of aldehydes in presence of ammonia, II, 75. Additive compounds of dicyclohexylamine [etc.], II, 77.
- Winans, J. G., and Davis, F. J., mercury-thallium molecular bands, I, 385.
- Wince, W. H. D. See Butlin, K. R.
- Winch, R. P. See Farnsworth, H. E.
- Winchester, C. F., seasonal metabolic and endocrine rhythms in domestic fowl, III, 858.
- Windaus, A., Dimroth, K., and Breywisch, W., photochemical process in the formation of photopyrociferols, II, 217.
and Kaufmann, O., dehydrocholestenone and its hydrogenation with aluminium isopropoxide, II, 84.
and Nagatz, J., 7-dehydroepicholesterol, II, 84.
- Windemuth, E. See Alder, K.
- Windle, W. F., and Becker, R. F., relation of anoxæmia to early activity in fetal nervous system, III, 718. Course of blood through fetal heart, III, 834.
See also Abel, S., Beaton, L. E., and DeMarsh, Q. B.
- Windwer, C., and Matzner, M. J., peptic ulcer: effect of high-protein diet on behaviour of disease, III, 133.
- Winegar, A. H., Pearson, P. B., and Schmidt, Hubert, synthesis of nicotinic acid in body of sheep, III, 750.
- Winer, J. H., and Schroeder, C. R., malignant hepatoma in white-tailed deer (*Odocoileus osceola*), III, 506.
- Winfield, J. M., effect of bile and bile salts of swine on gastric motility in the dog, III, 741.
- Winge, M., quantitative determination of gonadotropic content of urine in case of hydatid mole, III, 904.
- Winge, O., and Laustsen, O., cytoplasmic effect of inbreeding in homozygous yeast, III, 537.
- Winkel, A., and Witzmann, H., measurement of thermal motion in aerosols and its use in the determination of particle size, I, 320.
See also Nowotny, H.
- Winkelstein, A., and Berg, A. A., vagotomy plus partial gastrectomy for duodenal ulcer, III, 36.
See also Doubilet, H.
- Winkenwerder, W. L., Buell, M. V., and Howard, J. E., sensitising properties of nucleic acids and their derivatives, III, 254.
- Winkle, W. van, jun., and Cutting, W. C., acetylation of sulphanilamide and sulphapyridine in the cat, III, 677.
and Kennedy, N. K., voluntary running activity of rats fed propylene glycol and other glycols, III, 682.
See also Newman, H. W.
- Winkleman, L., and Schiffmann, A., serum-phosphatase in hepatic and biliary disorders, III, 40.
- Winkler, A., and Wiesbrock, H., basophilia from drinking water containing lead, III, 6.
- Winkler, A. W., Hoff, H. E., and Smith, P. K., factors affecting toxicity of potassium [relation to blood concentration], III, 188.
See also Hoff, H. E., and Smith, P. K.
- Winkler, E. See Julez, M.
- Winkler, H., functional changes in ascorbic acid content of endocrine organs, III, 145.
- Winkler, O. See Grube, G.
- Winnek, P. S. See Roblin, R. O., jun.
- Winnick, T., Davis, A. R., and Greenberg, D. M., physico-chemical properties of proteolytic enzyme from latex of milkweed, *Asclepias speciosa*, Torr.; comparison with other proteases. I. Chemical properties, activation-inhibition, pH -activity, and temperature-activity curves. II. Kinetics of protein digestion by asclepain. III. Kinetics of heat-inactivation of papain, bromelin, and asclepain, III, 534.
See also Greenberg, D. M.
- Winogradsky, S., biological synthesis of ammonia in soil and water, III, 166. Ecological microbiology, III, 352.
- Winslow, C. E. A., Gagge, A. P., and Herrington, L. P., influence of air movement on heat losses from clothed human body, III, 257.
See also Nielsen, M.
- Winstein, S., and Lucas, H. J., loss of optical activity in the reaction of optically active erythro- and threo- γ -bromo-butan- β -ols with hydrobromic acid, II, 3.
and Wood, R. E., dielectric constants of pairs of diastereomerides, I, 197.
See also Lucas, H. J.
- Winston, J. R. See Miller, E. V.
- Winter, C. A., Ingram, W. R., and Gross, E. G., effect of pitressin injections on serum electrolytes and water exchange of cats with diabetes insipidus and adrenal insufficiency, III, 207.
See also Ingram, W. R.
- Winter, E. R. S., Carlton, M., and Briscoe, H. V. A., interchange of heavy oxygen between water and inorganic oxy-anions, I, 171.
- Winter, H. C. See Binz, A. H.
- Winter, I. C., fat metabolism after liver injury; decreased fatty acid utilisation by male rats following the administration of carbon tetrachloride, III, 851.
- Winter, L. B., cardiac inositol of sheep, pig, and ox, III, 474.
- Winter, P. K., and Cramer, P. L., preparation of anhydrous aluminium bromide, I, 369.
- Winterbotham, J. See Skelding, A. D.
- Winterbottom, R., sulphanilyl derivatives of pyridine and quinoline amines, II, 107.
- Winterfeld, K., and Cosel, H. von, lupin alkaloids. XIX. Synthesis of racemic lupinine, II, 293.
- Winternitz, F. See Lindenberg, A.
- Winternitz, M., urea as diuretic, III, 760.
- Winternitz, M. C., and LeCompte, P. M., experimental infectious angitis, III, 565.
and Waters, L. L., lesions of larger vessels following renal artery constriction, III, 886.
See also Thomas, R. M.
- Winters, J. C. See Rehm, P.
- Winters, M., Peters, H. A., and Crook, G. W., pectin as prophylactic and curative agent for peptic ulcers produced with cinchophen, III, 133.
- Winters, W. L. See Fox, W. W.
- Wintersteiner, M. P. See Mackenzie, D. W.
- Wintersteiner, O. See Longwell, B. B., and Pearlman, W. H.
- Winton, E. R. See McKenzie, A.
- Winton, F. R. See Eggleton, M. G., and Shannon, J. A.
- Wintrobe, M. M., nutritive requirements of young pigs, III, 142.
Matthews, E., Pollock, R., and Dobyns, B. M., hæmopoietic disorder resembling Cooley's anaemia, III, 703.
and Mitchell, D. M., atypical manifestations of leukaemia, III, 468.
- Winzler, R. J., oxidation and assimilation of acetate by bakers' yeast, III, 767.
- Wirtz, F. See Brass, K.
- Wirth, D., and Kubasta, F., recovery of chickens from acute hæmorrhage, III, 9.
- Wirth, H. E., apparent and partial molal volumes of sodium chloride and hydrochloric acid in mixed solutions, I, 316.
- Wirth, J. C., and Nord, F. F., alcoholic fermentation of juice of *Fusarium* obtained with a wet-crushing mill, III, 767.
- Wirtz, E. See Sarre, H.
- Wirtz, K., kinetics of thermo-diffusion in liquids, I, 106.
See also Korsehing, H.
- Wirz, W. See Ruzicka, L.
- Wisansky, W. A., effect of acids in the general meaning of the term on activity of invertase, III, 261.
- Wise, F. See Rein, C. R.
- Wise, I. M., autopsy table, III, 618.
- Wise, L. E. See Peterson, F. C.
- Wise, P. H. See Newman, M. S.
- Wiselogle, F. Y. See Cain, C. K.
- Wiseman, B. K., Doan, C. A., and Wilson, S. J., thrombocytopenic purpura, III, 880.
- Wiser, M. See De Laet, M.
- Wishart, D. E. S., routine hearing tests, III, 301.

- Wishnofsky, M., Kane, A. P., Spitz, W. C., and Byron, C. S., tolerance of diabetics for glucose during various times of day, III, 597.
- Wiskott, A., adaptation in infancy, III, 225.
- Wislocki, G. B., hypophysis of adult Indian elephant, III, 277. Unusual mode of development of blood vessels of opossum's brain, III, 278. Placentation of *Solenodon paradoxus*, III, 699. Topography of hypophysis in elephant, manatee, and hyrax, III, 833. Peculiarities of cerebral blood vessels of opossum: diencephalon, area postrema, and retina, III, 873.
- and Dempsey, E. W., lymphatics of reproductive tract of female *Macaca mulatta*, III, 657.
- Wisniewski, P. J., theory of the proton, I, 55.
- Witcher, C. W. See Beyer, H. G.
- With, T. K., inhibition of utilisation of vitamin-A and carotene by liquid paraffin, III, 592.
- See also Jensen, H. B.
- Witheridge, W. N., and Walworth, H. T., ventilation of a trichloroethylene degreaser, III, 683.
- Witkin, M., aetiology and management of constipation in otherwise healthy infants, III, 311.
- Witkop, B. See Wieland, H.
- Witschi, E., quantitative determination of follicle-stimulating and luteinising hormones in mammalian pituitaries and discussion of gonadotropic quotient F/L, III, 899.
- and Riley, G. M., quantitative studies on hormones of human pituitaries, III, 494.
- See also Foote, C. L., and Stanley, A. J.
- Witt, N. F. See Dewey, B. T.
- Witte, E., unit of biological effect in protracted fractionated irradiation, III, 258.
- Wittebolle, P. See Bessemans, A.
- Witten, K. H. See Chrometzka, F.
- Wittenborg, M. H. See Scurry, M. M.
- Wittig, G., and Henkel, K., autoxidation of benzaldehyde in presence of 7:8-diphenylaceneaphthylene, II, 45.
- Wittig, H., feeding young and old lucerne to working horses, III, 591. Water economy of working horses on a ration of green fodder with soaked beet slices, III, 591.
- Witting, E. G., and Hughson, W., inherent accuracy of a series of repeated clinical audiograms, III, 492.
- See also Hughson, W.
- Wittle, E. L. See Marker, R. E.
- Witts, L. J., heparin in subacute bacterial endocarditis, III, 470. Routine blood counts with heparinised blood, III, 627.
- See also Black, D. A. K., and Hobson, F. C. G.
- Witzmann, H., elementary processes in dust and fog filtration, I, 331.
- See also Winkel, A.
- Wizinger, R., additive reactions of unilaterally positivised systems, II, 125.
- and Wenning, H., intramolecular ionisation, II, 195.
- Wodzicki, K. See Liche, H.
- Wöhlisch, E., history of statistical-kinetic theory of rubber-like elasticity, I, 18. Priority questions in the kinetic theory and thermodynamics of rubber-like elasticity, I, 71. Statistical-kinetic theory, thermodynamics, and biological importance of rubber-like elasticity, I, 99.
- Wöhlisch, E., is elastic anisotropy (anomalous compressibility) the cause of compression contraction of muscle? III, 196. Is muscle contraction an atomie-dynamic or kinetic-statistical process? III, 196.
- and Jühling, L., relations between elasticity, anomalies of flow, and ability to be spun into thread of sols, with special reference to fibrinogen, III, 470.
- Woerd, L. A. van der. See De Jongh, S. E.
- Woerner, C. A., effects of continuous intravenous injection of dextrose in increasing amounts on blood-sugar level, pancreatic islets, and liver of guinea-pigs, III, 434.
- Woessner, W. W., Elvehjem, C. A., and Schuette, H. A., determination of ascorbic acid in commercial milks, III, 430.
- Wofford, C. P., McCullagh, E. P., and McCullagh, D. R., blood-water, III, 881.
- Woglom, W. H., metastasis to lymph nodes from mouse sarcoma 37, III, 507.
- and Warren, J., retention of immunising power by Shope papilloma after exposure to ultra-violet radiation, III, 223.
- Wohl, K., mechanism of photosynthesis in green plants, III, 692.
- Wohl, M. G., and Feldman, J. B., vitamin-A deficiency in diseases of liver: detection by dark-adaptation method, III, 417.
- Wohlfel, T. See Evangelinos, P.
- Woinarosky, A. See Angelescu, E.
- Woker, G., and Antener, I., colour reactions of sterols and steroids; their importance for the investigation of constitutional problems and hormonal action, II, 15.
- Wokurek, W., action of sulphapyridine sodium succinate in cerebrospinal meningitis, III, 677.
- Wolbach, S. B., and Bessey, O. A., relative overgrowth of central nervous system in vitamin-A deficiency in young rats; explanation of neurological lesions in -A deficiency, III, 818.
- Wolcott, G. L., dangers in use of cosmetics, III, 339.
- Wold, M. See Bradford, W. L., and Scherp, H. W.
- Woldman, E. E., [phenolphthalein] test for determining presence of gastrointestinal lesions, III, 36.
- and Polan, C. G., colloidal aluminium hydroxide in treatment of peptic ulcer, III, 219.
- Woldrichova, O. See Nedved, M.
- Wolf, A. See Jungherr, E.
- Wolf, A. A. See Hoyné, A. L.
- Wolf, A. V., weight changes of hydrated, normal, and dehydrated frog muscles in Ringer's solution, III, 713.
- Wolf, D. See Badger, L. F.
- Wolf, E., and Lachman, G. S., hysterical blindness in children, III, 26.
- See also Crozier, W. J.
- Wolf, G. M. See Hennion, G. F.
- Wolf, K. L., and Harms, H., strong and weak dipole-formers, I, 116.
- Wolf, L., application of Hempel four-bulb gas pipette, I, 236.
- See also Schenck, M.
- Wolf, P. A., and Corley, R. C., significance of amino-acids for maintenance of nitrogen balance in adult white rat, III, 231.
- Wolf, P. M. See Zimmer, K. G.
- Wolf, S. See Eller, J. J.
- Wolf, U. See Roth, W. A.
- Wolfe, C. W., symmetry and unit cell of hopeite, I, 239.
- See also Berman, H.
- Wolfe, G. E. See Conn, H. J.
- Wolfe, J. K. See Drake, N. L., Hershsberg, E. B., and Talbot, N. B.
- Wolfe, J. M., and Bryan, W. R., effects induced in pregnant rats by injection of chemically pure carcinogenic agents, III, 31.
- Burack, E., Lansing, W., and Wright, A. W., changes in connective tissue of uterus and vagina of rat associated with advancing age, III, 808.
- Burack, E., and Wright, A. W., oestrous cycle and associated phenomena in strain of rats characterised by a high incidence of mammary tumours, III, 580.
- and Hamilton, J. B., action of testosterone on anterior pituitary of female rat, III, 214.
- Kirtz, M. M., and Loeb, L., cellular constitution of transplants of the anterior hypophysis in inbred strains of mice, III, 494.
- See also Fair, W. R.
- Wolfer, P., balance of circulation, III, 189.
- Wolferth, C. C. See Jeffers, W. A.
- Wolff, Eberhard, properties of polyimides in solution. XIII. Free energy and heat of dilution; system gutta-percha-toluene, I, 293.
- See also Meyer, K. H.
- Wolff, Etienne, and Lutz, H., modified technique for chorio-allantoic grafts in chick embryo, III, 623.
- Wolff, H. See Adams, R.
- Wolff, H. G., Hardy, J. D., and Goodell, H., measurement of effect of morphine, codeine, and other opiates on pain threshold and analysis of their relation to pain experience, III, 800.
- See also Hardy, J. D., Hough, H. B., and Schumacher, G. A.
- Wolff, J., protosil in scarlet fever, III, 921.
- Wolff, L. H., effect of parenterally administered drugs on colon of dog, III, 39.
- Wolff, R., permeability of the erythrocytes to magnesium *in vivo* and *in vitro*, III, 184.
- Wolffe, J. B., independent *versus* interconnected time marking system employed in electrocardiographs, III, 841.
- Wolfrom, M. L., Benton, F. L., Gregory, A. S., Hess, W. W., Mahan, J. E., and Morgan, P. W., osage orange pigments. II. Isolation of a new pigment, pomiferin, II, 19.
- and Fletcher, D. E., crystalline phenylurethanes of sugar glucosides, II, 268.
- and Gardner, T. S., melibiotol and maltitol, II, 362.
- and Gregory, A. S., osage orange pigments. III. Fractionation and oxidation, II, 185.
- and Konigsberg, M., aldehydo-maltose octa-acetate, II, 268.
- Konigsberg, M., and Moody, F. B., derivatives of the aldehydol form of sugars. III. Carbon one asymmetry, II, 364.
- Morgan, P. W., and Benton, F. L., osage orange pigments. IV. Degree of unsaturation and flavone nature, II, 313.
- and Weisblat, D. I., monothioacetals of galactose, II, 205. Action of phosphorus pentachloride on aldehydo-galactose penta-acetate; 1:1-dichloride of aldehydo-galactose penta-acetate, II, 268.

- Wolfsohn, G. See Karp, J., Sambursky, S., and Zondek, H.
- Wolkin, J. See Hyndman, O. R.
- Wollack, A. See Hutchinson, G. E.
- Wollan, E. O., present status of solar and sidereal time variation of cosmic rays, I, 189. X-Ray investigation of asymmetry of the atoms and atomic vibrations in a silver-cadmium alloy, I, 205. See also Schein, M.
- Wollard, H. H., and Harpman, J. A., connexions of inferior colliculus and of dorsal nucleus of lateral lemniscus, III, 798.
- Wollek, B., case of carbon monoxide poisoning in child, III, 887.
- Wollman, E., and Lacassagne, A., Twort-Hérelle phenomenon. VI. Determination of the dimensions of bacteriophages by means of X-rays, III, 267.
- Holweck, F., and Luria, S., effect of radiations on bacteriophage C_{16} , III, 773.
- and Wollman, (Mme.) E., inactivation of bacteriophage by dead bacteria; rôle of this factor in titration of bacteriophage by enumeration of colonies, III, 455.
- See also Holweck, F.
- Wollman, (Mme.) E. See Wollman, E.
- Wolman, I. J., and Roddy, R. L., value of banana and banana powder in treatment of infants and children having diarrhoea, III, 851.
- Wolman, M., photodynamic hæmolysis by carcinogenic hydrocarbons, III, 669.
- Wolman, W. See Petering, H. G.
- Wolosinski, H. T. See Worrall, D. E.
- Woloszyn, M. See Bezssonoff, N.
- Wolpers, C., and Ruska, H., electron-optical examination of structures in coagulation of blood, III, 185.
- Wolter, H., new resonance positions in absorption spectrum of thin metallic layers, I, 16.
- Woltman, H. W. See Ecker, A. D., and Shelden, C. H.
- Wolverkamp, H. P., and Kruyt, W., hæmocyanin and carbon dioxide carriage by blood, III, 389.
- Wonder, D. H. See Li, C. H.
- Wong, K. K. L. See Hamre, C. J.
- Wong, R. See Christensen, B. E.
- Wong, S. C., and T'ung, T., immunological studies on cellular constituents of *C. diphtherie*, III, 452.
- Woo, P., simple rule for evaluating atomic constants, I, 144.
- Woo, T. F. See Sah, P. P. T.
- Woo, T. T., and Chu, F. T., vitamin-A content of livers of Chinese infants, children, and adults, III, 512.
- Wood, C. See Bor, J., and Scholtz, J. R.
- Wood, C. E. See Shen, G.
- Wood, F. C. See Dunning, W. F.
- Wood, F. M., apparatus for prolonged exposure of plant sections to chlorine gas, III, 369.
- Wood, H., and Bernstein, H., chemical analysis of liver in case of essential xanthomatosis, III, 909.
- Wood, H. G., Andersen, A. A., and Werkman, C. H., nutrition of propionic acid bacteria, III, 934.
- and Werkman, C. H., fixation of carbon dioxide by cell suspensions of *Propionibacterium pentosaceum*, III, 262. Relationship of bacterial utilisation of carbon dioxide to succinic acid formation, III, 353.
- Wood, H. G., Werkman, C. H., Hemingway, A., and Nier, A. O., heavy carbon as tracer in bacterial fixation of carbon dioxide, III, 933.
- Wood, J. B., jun., and Cash, J. R., obesity and hypertension, III, 386.
- Wood, J. E., 3rd. See Norris, J. F.
- Wood, J. G. See Amos, G. L., and Barrien, B. S.
- Wood, J. L., and Du Vigneaud, V., new synthesis of cystine, II, 8. Synthesis of serine, II, 266.
- Wood, L. A. See McBain, J. W.
- Wood, L. J. See Link, H. L., and Powney, J.
- Wood, O. T., and McCravey, A., cerebral symptoms in fever therapy, III, 720.
- Wood, P., clinical aspects of vitamin-B complex, III, 143.
- See also Scadding, J. G.
- Wood, R. E., and Dickinson, R. G., equilibrium and kinetics of the thermal isomerisation of dichloroethylene catalysed by iodine, I, 115.
- See also Winstein, S.
- Wood, R. G., and McCale, C. H., apparatus for detecting pyro-electric effect in crystals, I, 420.
- Wood, R. W., resonance radiation of sodium, I, 49. Fire-fly "spinhari-scope," III, 140.
- and Dieke, J. H., negative bands of heavy nitrogen molecules, I, 281.
- See also Najjar, V. A.
- Wood, S. E. See Scatchard, G.
- Wood, W. A., crystalline structure and deformation of metals, I, 245. Lattice stress-strain diagram, I, 431.
- Wood, W. B. See Barker, W. H.
- Wood, W. B., jun., rabbit serum in pneumococcal pneumonia, III, 60. Control of dosage of antiserum in treatment of pneumococcal pneumonia. I and II, III, 264. Action of type-specific antibody on pulmonary lesion of pneumococcal pneumonia, III, 827.
- and Long, P. H., sulphapyridine. III. Mechanism of recovery from pneumococcal pneumonia, III, 437.
- See also Long, P. H.
- Woodard, H. Q., and Craver, L. F., serum-phosphatase in lymphomatoid diseases, III, 188.
- Woodbridge, P. D., Horton, J. W., and Connell, K., prevention of anæsthetic explosions, III, 67.
- Woodbury, R. A., Murphey, E. E., and Hamilton, W. F., blood pressure in aortic coarctation, III, 633.
- See also Robinow, M., and Volpito, P. P.
- Woodcock, H. E. de C. See Cooper, K. E.
- Woodford, A. O. See Lauder milk, J. D.
- Woodhall, B., anatomy of cranial blood sinuses with particular reference to the lateral, III, 120.
- and Graves, R. W., production of experimental tumours of brain with the Shope rabbit papilloma. II., III, 670.
- Woodhouse, K. W. See Guthrie, D.
- Woodman, A. S., pituitary gland of Atlantic salmon, III, 836.
- Woodman, J. F., and Taylor, H. S., hydrogenation of ethylene at surfaces of certain oxides. I. Zinc oxide and zinc chromite, I, 366.
- Taylor, H. S., and Turkevich, J., hydrogenation of ethylene at surfaces of certain oxides. II. Molybdenum oxide compounds, I, 366.
- Woodruff, E. H., Lambooy, J. P., and Burt, W. E., physiologically active amines. III. sec.- and tert.- β -Phenylpropylamines and β -phenylisopropylamines, II, 213.
- Woods, A. C., and Burky, E. L., experimental studies of ocular tuberculosis. V. Organotropism, or selective sensitisation of second eye, III, 488.
- Burky, E. L., and Friedenwald, J. S., experimental studies of ocular tuberculosis. IV. Relationship of ocular sensitivity, cutaneous sensitivity, and ocular activity in immune-allergic rabbit, III, 488.
- Woods, A. W. See Spies, T. D.
- Woods, D. D., relation of *p*-aminobenzoic acid to mechanism of action of sulph-anilamide, III, 611.
- Woods, L. P. See Park, O.
- Woods, M. W., reversible inhibition of tobacco mosaic virus in living cells with 0.002M-sodium cyanide, III, 544.
- Woodson, T. T., mercury vapour detector, I, 42.
- Woodward, (Miss) I., X-ray study of the porphyrins, I, 286.
- See also Robertson, J. M.
- Woodward, R. B., direct introduction of the angular methyl group, II, 281. 2,4-Dibromo- α -estradiol, II, 307. Synthesis of œstrone. I. 2- β -Phenylethylfurans as components in the diene synthesis, II, 312. Formation of Reiser's compounds in non-aqueous media, II, 314.
- Woody, N. C. See Ashman, R.
- Wooley, E. See Desnuelle, P., and Fromageot, C.
- Wooldridge, D. E., secondary emission from evaporated nickel and cobalt, I, 51. Secondary electron emission; temperature effects, I, 404.
- and Hartman, C. D., second electron emission; order and disorder effects, I, 404.
- Wooley, M. See Davison, R.
- Woollard, H. H., Weddell, G., and Harpman, J. A., neurohistological basis of cutaneous pain, III, 800.
- Woolley, D. W., pantothenic acid di-phosphoric acid, II, 269. Synthesis of pantothenic acid, II, 366. Isolation of a crystalline derivative of pantothenic acid, III, 537. Multiple nature of "rat filtrate factor," III, 595.
- McDaniel, L. E., and Peterson, W. H., bacterial growth factors. IX. Growth factor for *Clostridia*, III, 168.
- See also Oleson, J. J.
- Woolley, J. M. See Stacey, M.
- Woolley, J. R. See Greengard, H.
- Woonton, G. A., recording system designed for investigation of electrical relations in brains of small animals, III, 637.
- See also Miller, F. R.
- Wooster, W. A., and Martin, A. J. P., two-crystal Weissenberg X-ray goniometer, I, 271.
- Worcester, J. See Talbot, N. B.
- Worden, A. N. See Chick, H.
- Work, C. E. See El Sadr, M. M.
- Work, T. S., antiplasmodial action and chemical constitution. IV. Synthesis of complex carbinolamines and polyamines, II, 356.
- See also King, Harold.
- Wormnes, E. See Nowotny, H.
- Worner, H. W. See Greenwood, J. N.

- Woronow, D. S., mechanism of Wedensky phenomenon, III, 297.
- Worr, C. E. See El Sadr, M. M.
- Worrall, D. E., action of *p*-tolylthiocarbimide on ethyl acetonedicarboxylate, II, 23. Action of methylthiocarbimide on ethyl acetonedicarboxylate, II, 194. [Condensation of] arylthiocarbimides and ethyl acetonedicarboxylate, II, 196. Diphenyl series. IV. Diphenyl derivatives of phosphorus, arsenic, and antimony, II, 385.
- and Benington, F., action of aromatic amines on 2-iodo-5-nitrostyrene, II, 163.
- and Phillips, A. W., action of bromine on thioamides, II, 196.
- and Wolosinski, H. T., aromatic amines and 2-fluoro-5-*nitro*styrene, II, 370.
- Worrell, L. See Klemm, C. J.
- Worsley, R. R. Le G., "rotenoids" in Papilionaceae. I, III, 776.
- Wort, D. J., response of various spring wheats to vernalisation, III, 940.
- Worthington, R. V., and Allen, E., growth of genital tissues in response to oestrone as studied by the colchicine technique, III, 654.
- Wortis, H., Bueding, E., and Wilson, W. E., bisulphite-binding substances in blood and cerebrospinal fluid, III, 593.
- See also Bueding, E.
- Wortis, J., and Goldfarb, W., studying availability of various substrates for human brain metabolism during therapeutic insulin shock, III, 637. Availability of glucose for human brain oxidations, III, 843.
- and Lambert, R. H., irreversible or hyperglycaemic insulin coma; its cause and its response to blood transfusion, III, 486.
- See also Bowman, K. M.
- Wortley, W. R. S. See Salaman, R. N.
- Wottge, K., effects of X-rays on cell nucleus, III, 160.
- Wotton, R. M., and Zwemer, R. L., ingestion of fat by differentiated body cells of cat, III, 554.
- Wrenshall, C. L. See Dyer, W. J.
- Wrenshall, G. A., collisions of α -particles with carbon nuclei, I, 339.
- See also Hansen, W.
- Wright, A. J. See Hallpike, C. S.
- Wright, A. W. See Wolfe, J. M.
- Wright, C. A. See Glass, S. J.
- Wright, C. I., effect of selenium on urease and arginase, III, 347.
- Wright, F. H. See Parsons, C. G.
- Wright, G. F., microchemical technique. III. Semi-micro-preparation and purification of organic substances, II, 31.
- See also Birks, A. M., Brown, W. H., Stonestreet, G. O., and Wayman, M.
- Wright, G. W., Hallaran, W. R., and Wiggers, C. J., economy of effort index for hearts of normal and hypertensive subjects, III, 102.
- and Phelps, K., comparison of procedures for increasing blood flow to limbs using an improved optical plethysmograph, III, 476.
- Wright, I. See Ludden, J. B.
- Wright, I. S. See Flexner, J.
- Wright, J. L., and Gunn, F. D., sulphapyridine and serum in experimental type III lobar pneumonia, III, 919.
- Wright, J. S. See Fischer, M. M.
- Wright, L. D. See Haag, J. R.
- Wright, M. D., vitamin-B₁, III, 818.
- and Drummond, J. C., biological significance of tocopherols (vitamin-E), III, 146.
- See also Baker, A. Z., and Drummond, J. C.
- Wright, R., relation between coefficient of thermal expansion and structure of solutions, I, 354.
- See Erwin, G. S.
- Wright, R. W. See Hole, W. L.
- Wright, S., physiological aspects of rheumatism, III, 139.
- Wright, W. D., colour vision and chromaticity scales, III, 803.
- See also McKeon, W. M.
- Wright, W. G., chelation of potassium compounds of carboxylic and sulphinic acids, II, 303.
- Wright, W. H., and Brady, F. J., gentian-violet in oxyuriasis, III, 601.
- Brady, F. J., and Bozicevich, J., oxyuriasis. XIV. Controlled tests with various methods of therapy, III, 250.
- See also Brady, F. J.
- Wrinch, (Miss) D., fabric theory of protein structure, I, 350. Patterson projection of skeletons of structure proposed for the insulin molecule, I, 350. Calculation of the C:C linking strength and of resonance energies, I, 403. Cyclol hypothesis, II, 263. Fabric structure of proteins with special reference to cytogenetics, III, 877.
- and Harker, D., lengths and strengths of atomic bonds, I, 348.
- Wrong, N. W., treatment of hæmangiomas of skin in children by carbon dioxide snow, III, 605.
- Wronski, S., influence of temperature on the intensity of Röntgen rays reflected from different planes of the zinc crystal, I, 61.
- Wrook, D. H., abdominal rigidity, III, 798.
- Wu, C. H., and Tsai, C., hæmatological standards for the Chinese, III, 786.
- See also Tsai, C.
- Wu, C. K. See Conn, G. K. T., Lee, E., and Sutherland, G. B. B. M.
- Wu, C. S. See Segre, E.
- Wu, H. See Chang, C. Y., Lee, K., Liu, S. C., and Wang, C. F.
- Wu, T. Y., vibrational spectra of α -dihalogenoethanes and internal rotation, I, 11. Potential function of acetylene. II, I, 345.
- Wülfert, K., mechanism of ripening in bananas, III, 80.
- Wuhrmann, F., experiences with pectin-insulin (decurvon), III, 305. Rectal administration of insulin, III, 412.
- and Undritz, E., blood changes during treatment of pneumonia with sulphapyridine, III, 520.
- See also Koller, F.
- Wuis, P. J. See Nauta, W. T.
- Wulff, P., electrolytic conductivity and the hydrogen link, I, 74.
- and Schwindt, H., measurement of dielectric loss and of high-frequency conductivity. VIII, I, 134.
- Wunderly, C., regulation of one enzymic degradation by another, III, 609.
- Wunderly, H. L., mortar and pestle for powdering glass, I, 377.
- See also Shinn, M.
- Wurm, H., obliterating hepatic endophlebitis in sucklings, III, 665.
- See also Geissler, H.
- Wurm, K., weakening of stellar radiation by "continuous" molecular absorption in later types of star, I, 428.
- and Meister, H. J., spectrum of titanium monoxide in the λ region 8000—12000 Å., I, 428.
- Wurm, M. See Noble, G. K.
- Wurmser, R., and Chevillard, L., energetique, metabolisme de base, thermoregulation (Janvier 1937—Janvier 1938) [energy, basal metabolism, and thermo-regulation], III, 946.
- and Filitti-Wurmser, S., equilibrium between valine and ammonium dimethylpyruvate, I, 72.
- Wurzschmitt, B., and Schuhknecht, W., detection and determination of ortho-, pyro-, and meta-phosphoric acid in the presence of one another, I, 268.
- Wuyts, H., and Vaerenbergh, J. van, elimination of the acidic group from dithiocarboxylic acids, II, 26.
- Wyart, J., See Michel-Lévy, A.
- Wyatt, W. R., differentiation of the vitamins of the B complex and their distribution in foods, III, 321.
- Wyburn, G. M. See Baesich, P.
- Wycis, H. See Spiegel, E.
- Wyckoff, R. W. G. See Moore, D. H., and Scheer, J. van der.
- Wyk, A. J. A. van der, influence of electrolytes on solubility of organic substances in water, I, 319.
- See also Hagger, O., and Misch, L. C.
- Wylde, E. See Crippa, G. B.
- Wyllie, D., Ritchie, M., and Ludlam, E. B., reaction between phosphorus and iodine in carbon tetrachloride solution, I, 296.
- Wyllie, J., modified apparatus for Gutzeit test for arsenic, III, 778.
- Wyman, L. L., tube illuminator for metallography, I, 83.
- Wynia, F. See Youmans, W. B.
- Wynn, W. See Haldi, J.
- Wynn-Williams, C. E. See Fertel, G. E. F.
- Wynne, S. W., nutrition study of camp children, III, 230.
- Wynne-Jones, W. F. K. See Everett, D. H.
- Wyse, A. B., origin of the 4932 Å. emission in the spectra of Nova, I, 87.
- Wyss, A., creatine-creatinine metabolism in hyperthyroidism, III, 29.
- Wyss, J. See Plattner, P. A.
- Wyss-Chodat, F., treatment of gonorrhoea with sulphapyridine, III, 920.

Y.

- Yabe, Y., blood platelet counts in surgical diseases, especially in renal tuberculosis, III, 470.
- Yablunsky, H. L. See Gilman, H.
- Yadav, H. N., laboratory method of producing continuous ultra-violet light, I, 428.
- Yakimach, A. See Metalnikov, S.
- Yakushiji, E., peroxidase, III, 345. Polyphenolases, III, 632.
- See also Okunuki, K.
- Yam, T. H. See Gaillard, P. J.
- Yamada, P. M. See Manville, I. A.
- Yamafuji, K., Nishioeda, M., and Ryushi, R., [biological] water decomposition and oxidation as coupled reactions, I, 263.
- and Yoshida, Tadashi, determination of reducing sugar in presence of sucrose, III, 779.
- See also Hirata, T.

- Yamagata, S., biological reduction. II. Nitrate- and nitrite-reductase from *Bacillus pyocyaneus*, III, 355.
- Yamagishi, G., enzymic studies on cereals. XI. Adsorption of rice amylase. XII. Elution of adsorbed rice amylase, III, 766.
- Yamaguchi, S., electron diffraction of oxide films on light metals: Mg, Al, and Be, I, 199. Electron diffraction study of surfaces of alkali and alkaline-earth metals exposed to air, I, 287. Study of amorphous films by electron diffraction, I, 410.
- See also Itaka, I.
- Yamaguti, K. See Asano, M.
- Yamamoto, Mikio, light figures in single crystals of nickel and copper, I, 405.
- Yamamoto, Mitiko. See Nakanishi, S.
- Yamamoto, R., and Hara, T., vitamin-C available from plant sources in Taiwan. I. Preparation of pure vitamin-C from pineapple juice by means of magnesium oxide. II. Conservation of vitamin-C from pineapple in dried milk, III, 751.
- Hara, T., and Nishizawa, S., vitamin-C available from plant sources in Taiwan. III. Vitamin-C content of inedible green leaves, III, 751.
- Ito, K., and Tin, H., essential oil of Formosan black tea. IV.-VI., III, 832.
- Yamamoto, T., membrane elevation in egg of *Oryzias latipes* at fertilisation, III, 699. Changes in egg of *Oryzias latipes* at fertilisation, III, 700.
- Yamamura, Z. See Kawasaki, T.
- Yamanaka, N., elasto-resistance change of nickel, iron, and some nickel-iron alloys, I, 405.
- Yamanoue, M., anthelmintic drugs in frogs, III, 924.
- Yamao, E., action of acetylcholine on movement of rabbit's stomach, III, 906.
- Yamasaki, F., and Sinma, K., β -radioactivities of rhenium, I, 242.
- Yamasaki, H., lymphagocytic action of histamine on thoracic duct lymph, III, 251. Lymphagogue action of adrenaline on thoracic duct lymph, III, 630.
- Yamasaki, I., flavins produced during fermentation by acetone-butyl alcohol bacteria. III. Identity of flavin from rice with lactoflavin, III, 452.
- Yamasaki, Kazumi, Takahashi, Kumao, and Kim, C. H., isodihydroxycholeonic acid; specificity of Haddamsten's reaction for cholic acid, II, 309.
- Yamasaki, Kazuo, absorption spectra of metallic complex salts of 2:2'-dipyridyl, III, I, 344.
- Yamashita, H. See Miwa, M., and Mori, K.
- Yamono, R. See Hirano, S.
- Yang, E. F., ionisation of calcium phytate, III, 618.
- and Dju, M. Y., total and phytic acid-phosphorus in foods, III, 426. Total and available iron in vegetable foods, III, 426.
- and Platt, B. S., determination of free vitamin-B₁ in pure preparations, food, and urine, III, 233.
- and Read, B. E., vitamin-B₁ content of Chinese plant beriberi remedies, III, 513.
- See also Hou, H. C.
- Yannet, H., and Darrow, D. C., effect of depletion of extracellular electrolytes on composition of skeletal muscle, liver, and cardiac muscle, III, 755.
- Yano, Z., anomaly in nickel-rich solid solution of nickel-chromium binary system, I, 318.
- Yant, W. P. See Schrenk, H. H.
- Yaoi, H., and Fujimoto, S., is there a scarlet fever toxoid? III, 265. Therapeutic effect of streptococcus toxoid on erysipelas, III, 599.
- Kanazawa, K., Murae, M., and Arakawa, S., size of Japanese epidemic encephalitis virus as estimated by "gradocol" membrane, III, 357.
- Yarbrough, O. D. See Behnke, A. R.
- Yarnes, H. See Doubilet, H.
- Yarnis, H. See Crohn, B. B.
- Yarnold, G. D., mechanical analogy to the motion of electrons in gases, I, 89.
- Yarnold, K. W., and Fitzpatrick, H. D. N., radiation and "stiffness," III, 763.
- Yasaki, T., fission products and induced β -ray radioactivity of uranium by fast neutrons, I, 400.
- See also Nishina, Y.
- Yashoda, (Miss) K. M. See Varma, P. S.
- Yasuda, Morio, and Ohno, K., micro-determination of amount and iodine value of lipin fractions [in biological material], III, 779.
- Yasuda, Motomu. See Matsui, A.
- Yasuzumi, G., isoelectric point of animal tissues. IX., III, 225.
- Yasuzumi, S., electrostatic charge of eye, III, 300.
- Yata, T., fever therapy of syphilis, III, 256.
- Yatagawa, S., electrolytic determination of zinc by use of a buffer solution, I, 419.
- Yates, A. L., action of sulphonamide in infective colds, III, 329.
- Yates, H. B. See Morley, J.
- Yates, W. W. See Gjullin, C. M.
- Yeager, C. H., Painter, T. S., and Yerkes, R. M., chromosomes of chimpanzee, III, 784.
- Yeager, C. L., and Walsh, M. N., electroencephalogram after ligation of carotid arteries, III, 720.
- Yeager, J. F., electrical stimulation of isolated heart preparations from *Periplaneta americana*, III, 289.
- Yeagley, H. L. See Coleman, H. S.
- Yearian, H. J., diffraction of protons of medium energy by vapour molecules, I, 89.
- See also Henderson, W. J.
- Yeddanapalli, L. M. See Jungers, J. C.
- Yeh, H. L., and Adolph, W. H., calcium, phosphorus, and nitrogen balances with pre-school children, III, 241.
- Yeh, K. S. See Guy, R. A.
- Yeh-Tung, G. F. See T'ung, T.
- Yeou Ta. See under Ta, Y.
- Yerkes, R. M., and Nissen, H. W., pre-linguistic sign behaviour in chimpanzees, III, 22.
- See also Yeager, C. H.
- Yesinick, L. See Gellhorn, E.
- Yi, C. L., nature of sensory end-organs associated with pressor fibres, III, 384.
- Yin, W. See Sah, P. P. T.
- Yntema, L. F. See Wade, W. H.
- Yoe, J. H., and Barton, C. J., colorimetric determination of copper with triethanolamine, I, 393. Colorimetric determination of cobalt with β -nitroso- α -naphthol, I, 394.
- and Boyd, G. R., jun., patent-blue V as a pH and redox indicator, I, 373.
- See also Barton, C. J.
- Yoffey, J. M., and Drinker, C. K., lymphatics of nasal mucous membrane in cat and monkey, III, 1.
- Yohda, Y. See Nakamura, H.
- Yokoyama, S., influence of vitamin-C on anaphylactic shock, III, 515.
- Yokoyama, T. See Masayama, T.
- Yonge, C. M. See Lloyd, A. J.
- York, R., thermodynamic properties from P - V - T data, I, 105.
- York, R., jun., and Weber, H. C., isothermal changes in enthalpy for some gases, I, 202.
- Yorke, W., recent work on chemotherapy of protozoal infections, III, 599.
- Yoshida, F. See Ogata, D.
- Yoshida, S. See Ochiai, E.
- Yoshida, Tadami, effect of non-alkaloidal anti-spasmodics on plain and leech muscle and comparison with that of atropine and papaverine. I. Excised rabbit's intestine. III. Actions on rabbit intestine *in situ* and on bronchial spasm, III, 61, 249.
- Yoshida, Tadashi. See Yamafuji, K.
- Yoshida, Tohiti. See Titani, T.
- Yoshida, Y., pharmacognosy of leaves of *Hamamelis* spp. II., III, 548.
- Yoshikawa, H., state of copper in blood and tissues, III, 472. Copper metabolism and hypophysis, III, 472. Copper in cerebrospinal fluid, III, 487.
- and Sibuta, H., adrenal gland in regulation of blood-copper, III, 472.
- Yoshikawa, N., morphine elimination in urine and faeces by various animal species, III, 928.
- Yoshiki, B., crystallographic properties of anhydrous and trihydrated sodium carbamates, I, 312.
- Yoshiki, S. See Kuwada, S.
- Yoshitake, M., biochemistry of carbohydrates. LII. Determination of free amino-sugar in normal and diabetic urine. LIII. Glucosamine as glycogenetic substance in the organism. LIV. Hyperglycemia after glucosamine injection, III, 667, 754.
- Yost, D. M. See Borsook, H., Burcik, E. J., Cooley, R. A., Crowell, W. R., and Osborne, D. W.
- Yosi. See under Yoshi.
- Yost, W. J., self-consistent fields and diamagnetic susceptibility for Mg II, I, 428.
- Youle, P. V. See Olson, A. R.
- Youmans, J. B., influence of vitamin deficiencies on other diseases, III, 426.
- Youmans, W. B., Aumann, K. W., and Haney, H. F., relation of various groups of adrenaline molecule to its intestine-inhibiting function in unanesthetised dogs, III, 30.
- Aumann, K. W., Haney, H. F., and Wynia, F., reflex cardiac acceleration and liberation of sympathomimetic substances in unanesthetised dogs during acetylcholine hypotension, III, 565.
- See also Aumann, K. W.
- Young, D. P. See Kenyon, J.
- Young, DeW. S., Fukuhara, N., and Bigelow, L. A., action of fluorine vapour on organic compounds. VIII. Influence of dilution on vapour-phase fluorination of ethane, II, 265.
- See also Calfee, J. D.
- Young, E. G., native state of proteins in egg-white, III, 763.

- Young, F. G., pituitary gland and carbohydrate metabolism, III, 433. Anterior pituitary fractions and carbohydrate metabolism. I. Preparation and properties of diabetogenic extracts, III, 641.
See also Chance, M. R. A., Griffiths, M., Marks, H. P., and Parkes, A. S.
- Young, F. M. See Boyd, E. M.
- Young, G., streaming in diffusion fields, I, 66. Elongation and constriction in cell division, III, 180.
- Young, G. T. See Bawn, C. E. H., and Hawkins, E. G. E.
- Young, H. Y. See Sideris, C. P.
- Young, I. M. See Downman, C. B. B.
- Young, J., crystallographic studies of meteoric iron, I, 178.
- Young, J. A., jun., minerals from deep sea cores and surface deposits of Bermudian calcareous sediments, I, 44.
- Young, J. B., paraplegic beri-beri, III, 233.
- Young, J. Z. See Pumphrey, R. J., and Webb, D. A.
- Young, L. A., rate of recrystallisation in polycrystalline solids, I, 364.
- Young, L. E., Phillips, W. A., and Murlin, J. R., absorption of insulin from alimentary tract, III, 411.
- Young, M., and Ince, J. G. H., transmutation of vertebrae in lumbosacral region of human spine, III, 463. Radiographic comparison of male and female pelvis, III, 463.
- Young, M. Y. See Fleming, A.
- Young, R. A., pulmonary circulation before and after Harvey, III, 292.
- Young, R. C., and Bernays, P. M., possible source of error in gravimetric determinations involving the use of hydrogen peroxide followed by nitron, I, 233.
- Young, R. H. See Harman, J. B.
- Young, S. M., and Greaves, J. E., influence of variety and treatment on phytin content of wheat, III, 368.
- Young, V. J., Ellett, A., and Plain, G. J., distribution in angle of α -particles from lithium bombarded with protons, I, 426.
- Young, W. C. See Boling, J. L.
- Young, W. G., and Nozaki, K., allylic rearrangements. X. Reproducibility of standard methods for preparation of butenyl bromide mixtures, II, 148.
- Richards, L., and Azorlosa, J., allylic rearrangements. IX. Isolation and rearrangement of primary and sec. pentenyl, hexenyl, and heptenyl bromides, II, 2.
- Youngburg, G. E., "new colour reaction for vitamin-B₁," III, 322.
- and Youngburg, M. V., free and combined silica in silicotic lungs, III, 479.
- Youngburg, M. V. See Youngburg, G. E.
- Youngken, H. W., pharmacognosy of parathyroid gland. I, III, 123.
- Youtz, A. C. See Karlin, J. W.
- Yu, J. M., mechanism of iodoacetate and fluoride hyperglycemia, III, 472.
See also Chang, J.
- Yü, T. F. See Chen, K. C., Chu, H. I., and Snapper, I.
- Yu, T. T. See Chang, T. H.
- Yü, W.-C. See Chang, T.-L.
- Yu, W.-Y. See Chi, Y.-F.
- Yu Han Tang. See Maisin, J.
- Yudkin, A. M., and Geer, H., investigation of experimental cataracts in albino rat, III, 397.
- Yudkin, J. See Wang, Y. L.
- Yuile, C. L., and Knutti, R. E., blood plasma-proteins as influenced by intravenous injection of gum acacia, III, 187.
- Yuill, M. E. See Humphrey, J. H., and Neuberger, A.
- Yukawa, H., and Okayama, Taisuke, absorption of slow mesotrons in matter, I, 54.
See also Inoue, Y.
- Yuska, H. See Kramer, B., and Sobel, A. E.
- Z.
- Zabor, J. W., and Noyes, W. A., jun., photochemical studies. XXXII. Photochemical reaction between nitrous oxide and hydrogen, I, 417.
- Zabramni, D. T., fruit of central Asiatic varieties of *Eleagnus*, III, 461.
- Zacek, J. See Hercik, F.
- Zacharias, J. R. See Kellogg, J. M. B.
- Zacharias, L. R. See Rosen, S.
- Zachariassen, W. H., diffuse scattering of X-rays by crystals, I, 285. Crystal structure of sodium formate, HCO₂Na, I, 312. Diffraction maxima in X-ray photographs, I, 375.
See also Siegel, Stanley.
- Zacharov, B. A. See Ravitsch, M. B.
- Zacharova, A. I., action of hydrogen chloride on dimethyl- and methylethyl-bromomethinylcarbinol, II, 33.
- Zacharova, A. V., pigment of the seed-husks of *Andropogon sorghum*, Brot., II, 19.
- Zadina, R., importance of condition of digestive tract in histamine contraction of isolated intestine, III, 440. Effect of temperature on histamine contraction of guinea-pig intestine, III, 440.
- and Vožeh, O., effect of sclerotia [of ergot] from *Phragmites communis*, III, 679.
- Zagami, V., physico-chemical properties of semen, III, 131. Vagus and carbohydrate metabolism, III, 150.
- Zagiansky, A. L., minerals of the Yellow River placers, I, 179.
- Zagvozdkin, K. I., Rabinovitsch, J. M., and Barilko, N. A., equilibria in the system P₂O₅-water, I, 204.
- Zahler, H., action of male sex hormone in human castrate, III, 308.
- Zaitzev, A. A., temperature of electrons in [an] electric field and calculation of Townsend's α , I, 242.
- Zaitzeva, A. A., content of chlorophyll in wheat as related to development, III, 362.
- Zajtmann, J. See Longchambon, L.
- Zakrzewski, K., and Piekara, A., theory of dielectric polarisation in liquids, I, 10.
- Zakutskaja, M. A. See Naumov, S. N.
- Zalesky, M. See Wells, L. J.
- Zambelli, E. See Gambigliani-Zoccoli, A.
- Zamboni, P., burette for intravenous injection at constant rate, III, 17. Cardiac activity of drugs studied by new preparation of isolated frog's heart, III, 841.
- Zambotti, V., polarographic study of pentenoic acids, II, 118. Displacement of adsorbed oxygen by surface-active substances, III, 866.
- and Ferrante, A., toxicity of pyruvic acid, III, 58. Transformation of pyruvic acid from keto- into enol-form by vitamin-B₁, III, 58. Surface activity of vitamin-B₁ by polarographic methods, III, 428. Toxicity of pyruvic acid solutions, III, 527.
- Zamecheck, N. See Dill, D. B.
- Zamecnik, P. C., and Koletzky, S., lack of carcinogenic potency of sulphanilamide and prontosil soluble in mice, III, 316.
- Zamenhof, S., measurement of small amounts of heat and small changes of temperature, I, 271.
- Zamfir, D., Tomescu, I., and Iancu, I., familial acholuric jaundice with diminished fragility of red corpuscles, III, 184.
- Zanaty, A. F. See Azmy, S.
- Zanean, L., treatment of barbiturate poisoning, III, 63. Use of organic solvents for injection of insoluble pharmaceutical substances, III, 66. Influence of organic solvents on activity of drugs, III, 528. Sodium pyrocatecholdisulphonate as complex former in chemotherapy, III, 922.
- Zanetti, J. E., and Bashour, J. T., sec.-2-furfurylamines, II, 19. 2-Furfurylpropylamine and di-2-furfuryl tert. amines, II, 230. Mono- and di-2-furfurylglycine, II, 311.
- Zangerl, R., homology of skull elements in turtles, III, 781.
- Zangwill, O. L. See Craik, K. J. W.
- Zanotti, V., reactions of diethylbarbituric acid and pyrazolone derivatives with silver proteinate, silver nitrate, and ferric chloride, II, 242.
- Zanzucchi, G., changes in blood-calcium and -phosphorus and in Ca: P ratio after bone operations, III, 379. Glycerol-splitting power of bacteria, III, 768.
- Zapp, J. A., jun. See Stadie, W. C.
- Zappasodi, P. See Lurie, M. B.
- Zappi, E. V., and Fernandez, M., compounds of iodine trichloride with pyridine, quinoline, and trimethylamine, II, 53.
See also De Degiorgi, A. C.
- Zaprometov, B. G., and Vasilieva, S. A., stabilisation of sulphur hydrosols by protective agents, I, 70.
- Zartman, I. F. See Hubbard, J. C.
- Zaumeyer, W. J., mosaic diseases of pea, III, 773.
- Zavalov, I. N., fluorine in the underground waters of the Chibina region, I, 303.
- Zazele, H. See Abramson, D. I.
- Zechmeister, L., and Cholnoky, L. von, paprika colouring matter. XI. Isomerisation phenomena, II, 228. Carotenoids of Hungarian wheat flours, III, 832.
- Cholnoky, L. von, and Polgár, A., [isomerisations of xanthophylls], II, 81. Isomerisation of zeaxanthin and physalene, II, 138.
- and Tóth, G., enzymes of emulsin which attack compounds of the chitin series, III, 164.
- Tóth, G., and Vajda, E., enzyme of *Helix pomatia* which attacks compounds of the chitin series, III, 164.
See also Tóth, G.
- Zeckwer, I. T., histologic changes in pituitaries of parabiotic rats, III, 899.
- Zeglio, P. See Giordano, C.
- Zehn, P., action of male sex hormone in enuresis, III, 308.
- Zehnder, L., new invisible radiation, I, 430.
- Zeiger, K., R. E. Liesegang's diffusion histology, III, 224.
- Zeile, K., and Meyer, H., constitution of the prosthetic group of cytochrome-c, II, 110.

- Zeise, H., calculating combustion temperatures, I, 175. Gas equilibria $C_2 \rightleftharpoons 2C$, $S_2 \rightleftharpoons 2S$, $Se_2 \rightleftharpoons 2Se$, and $Te_2 \rightleftharpoons 2Te$, I, 294. Hydrogenation-dehydrogenation equilibria in gases, I, 321. Thermal cracking of free hydroxyl and water molecules into their atoms, I, 358.
- Zeisler, E. P., elasti-glass dermatitis, III, 929.
- Zeissler, J., and Günther, O., sterilisation by boiling in zephrol and quartamon solution, III, 359.
- Zeldes, M., alveolar lining of lung in relation to viability of foetus, III, 634.
See also Levinson, A.
- Zeldis, L. J., effect of combinations of amniotin and progesterone on uterine weights of rats and mice, III, 904.
- Zelinski, N. D., and Arbusov, J. A., contact conversion of the six-membered into the five-membered ring, II, 9. Contact isomerisation of menthene, II, 136.
See also Elagina, N. V.
- Zeller, A., determination of sucrose by the modified Hagedorn-Jensen method, III, 370.
- Zeller, E. A., Birkhäuser, H., Mislin, H., and Wenk, M., enzymic degradation of polyamines. V. Occurrence of diamine-oxidase in man, mammal, and bird; occurrence of choline-esterase in birds, III, 162.
- Stern, R., and Wenk, M., enzymic degradation of polyamines. VI. Reaction of diamines with diamine oxidase, III, 345.
- Zeller, M., oral ragweed pollen therapy, III, 255.
See also Feinberg, S. M.
- Zellhoefer, G. F., See Copley, M. J.
- Zelson, C., and Steinitz, E., treatment of cryptorchidism with male sex hormone, III, 131.
- Zelvin, R. R., See Kursanov, D. N.
- Zemiatschenski, P., dependence of weathering of minerals on climatic conditions, I, 239.
- Zener, C., internal friction in solids, I, 247.
See also Barnes, A. H., and Randall, R. H.
- Zengheli, C., and Stathis, (Mile.) C., preparation of rhenum in the colloidal state, and its catalytic properties, I, 70.
- Zenk, W., See Arnold, R. T.
- Zenter, E. M., theory of secondary emission from semi-conductors, I, 276.
- Zepeda, J. E., See Gershenfeld, L.
- Zéphiropff, P., Dobrovolskaja-Zavadskaja, N., and Drosdovsky, C., tests for activity of water-soluble extracts of adrenal cortex, III, 409.
- Zerfas, L. G., and Dixon, M., cell for determination of oxidation-reduction potential, I, 235.
See also Dixon, M.
- Zernike, F., and Lier, C. van, theory of the Senffleben effect, I, 8.
- Zernike, J., theory of enveloping electrons, I, 16.
- Zernoff, V., and Kotzovsky, L., anti-tubercular chemotherapy in insects; effect of 1162 F. on *Galleria melonella* caterpillars, III, 245.
- Zetzsche, F., and Büttiker, W., organic phosphoric acid compounds. VII. Mono- and di-anilidophosphates, II, 274.
and Friedrich, A., characterisation of carboxylic acids as ureides with aid of carbodi-imides. V., II, 63.
- Zetzsche, F., and Röttger, G., characterisation of carboxylic acids as ureides with aid of carbodi-imides. VI. Characterisation of aromatic carboxylic acids as ureides. VII. Detection of α -halogenofatty acids, II, 129, 274.
- Zia, S. H., Pang, K. H., and Liu, P. Y., typhus vaccine prepared from agar-tissue culture, III, 455.
- Zichis, J., hog-cholera virus, III, 78.
- Zief, M., See Mason, J. P.
- Ziegler, E. R., Osterberg, A. E., and Hovig, M., prothrombin changes in banked blood, III, 558.
- Ziegler, J. B., See Ramp, D. G., and Rosen, S. R.
- Ziegler, K., Grimm, H., and Willer, R., organo-alkali compounds. XV. Controlled 1:2 and 1:4 polymerisation of butadiene, II, 61.
- Ziegler, M. R., plasma-electrolytes as affected by insulin and by various partial pressures of atmospheric gases, III, 473.
See also McQuarrie, J.
- Ziegler, W. M., and Connor, R., α -bromo- α -sulphonamides, II, 269.
See also Schaffer, N. K.
- Zielinski, M. A., See Beatty, R. A.
- Zienke, H., breakdown of liver-glycogen after death, III, 416.
- Ziering, A., See Niederl, J. B.
- Ziff, M., and Chargaft, E., mechanism of action of heparin, III, 706.
See also Chargaft, E.
- Ziffer, R., See Neuberg, C.
- Ziffren, S. E., accidental perivascular injection of thorotrast, III, 823.
- Owen, V. A., Hoffman, G. R., and Smith, H. P., simple bedside test for control of vitamin-K therapy, III, 469.
See also Smith, H. P.
- Zih, A., effect of bilirubin on erythropoiesis in anæmia, III, 6. Effect of bilirubin on erythropoiesis after hæmorrhage, III, 6.
- Zilberman, J. I., Ivanov, P. T., and Mischtschenko, K. P., absorption of carbon dioxide by solid sodium carbonate, I, 22.
- Zilva, S. S., See Arcus, C. L.
- Zimanyi, S., acholuric catarrhal jaundice in infancy, III, 586.
- Zimmer, K. G., Born, H. J., and Wolf, P. M., ionisation by combined γ - and neutron preparations, III, 446.
See also Timoféev-Ressovski, N. W.
- Zimmerman, H. M., pathology of nervous system in vitamin deficiencies, III, 482.
See also Kahn, E.
- Zimmerman, P. W., and Hitchcock, A. E., experiments with vapours and solutions of growth-substances, III, 365. Comparative activity of root-inducing substances and method for treating cuttings, III, 365. Adventitious shoots and roots induced by natural influences and synthetic growth-substances, III, 830.
- Hitchcock, A. E., and Wilcoxon, F., responses of plants to growth-substances applied as solutions and as vapours, III, 82.
See also Hitchcock, A. E.
- Zimmerman, W. I., Tressler, D. K., and Maynard, L. A., determination of carotene in fresh and frozen vegetables. I. Carotene content of green snap beans and sweet corn, III, 368.
- Zimmerman, W. J., See Gaebler, O. H.
- Zimmermann, W., micro-analytical adaptation of direct determination of oxygen in organic substances, II, 199. New media as substitutes for agar, III, 358.
- Zimmermann-Meinzingen, O. von, disturbances of metabolism and digestion in patients with circulatory failure, III, 189. Clinical significance of electrocardiographic findings, III, 190.
- Zinck, K. H., hepato-renal insufficiency after burns, III, 910.
- Zink, A., sterilisation of antitoxic sera. I. Value of the commoner preservatives, III, 359.
- Zinnemann, K. S., See Cooper, K. E.
- Zinnitz, F., serum-choline-esterase and -cholesterol, III, 561. Vagus effect on blood pressure and serum-choline-esterase, III, 630.
See also Straub, W.
- Zintl, E., and Leverkus, H., equilibrium measurements on sodium silicates, I, 117.
- Ziporkes, J., See Theodore, F. H.
- Zironi, A., specific hypersusceptibility in infections and cancer, III, 855.
See also Meyerhof, H. L.
- Ziskind, E., Loken, R., and Gengerelli, J. A., effect of metrazol on recent learning, III, 526.
and Tyler, D. B., decorticate and decerebrate preparations produced by insulin shock, III, 720.
See also Somerfeld-Ziskind, E., and Tyler, D. B.
- Zisserman, L., and Birch, L., prophylaxis and treatment of poison ivy dermatitis with extract of *Rhus toxicodendron*, III, 255.
- Ziv, D. M., electrochemical extraction of polonium, I, 229.
- Zizmor, J., See Fries, J. H.
- Zocher, H., and Saechting, H., critical investigation of analysis of hyposulphite preparations, I, 37.
- Zohn, B., placental transmission of hypersensitiveness to *Ascaris lumbricoides* actively induced in the pregnant woman, III, 67.
- Zoll, P. M., See Blumstein, A.
- Zollner, S., See Breu, W.
- Zolotarevskaja, S., See Bruns, B.
- Zon, L., Ceder, E. T., and Crigler, C. W., presence of histamine in platelets of rabbit, III, 188.
- Zondek, B., bleeding induced in uterine mucosa of rabbit by oestrogenic hormone, III, 735. Prolonged oestrogen administration, III, 810.
- Hochman, A., and Sulman, F., effect of heterologous antigonadotropic sera on course of pregnancy in rats, III, 214.
and Stein, Ludwig, glycogen content of human uterine mucosa, III, 905.
and Sulman, F., inactivation of diethylstilboestrol in organism, III, 130. Does the antigonadotropic factor occur in the organism under physiological and pathological conditions? III, 214. Vaginal cycle of *Microtus guentheri* and its response to oestrogenic and gonadotropic hormones, III, 652.
- Zondek, H., and Wolfsohn, G., pituitary and retinitis pigmentosa, III, 641.
- Zondek, S. G., See Brückmann, G.
- Zonis, S., action of sulphuric acid on *tert*-dienols, II, 149.

- Zorn, W., Brüggemann, H., and Bünger, W., utilisation of feeding-stuffs by foals, III, 913.
- Zorzoli, G. See Scoz, G.
- Zotterman, Y. See Euler, U. S. von.
- Zouckermann, R., high-frequency discharge with external electrodes, I, 137.
- and Heyberger, L., measurement of the velocity of propagation of explosions [in gases], I, 84.
- Zscheile, F. P., and White, J. W., jun., microscope hot stage for determination of m.p.; application to carotenoid pigments, I, 374.
- Zubareva, A. V., growth of gastric epithelium *in vitro*, III, 88.
- Zuber, K. See Meyer, E.
- Zucchetti, M. See Illari, G.
- Zuckerman, I. C., Jacobi, M., Kogut, B., and Klein, B., effects of orally administered olive oil, oleic acid, and glycerol, with and without bile salts, on quantity of bile secretion [in man], III, 743.
- Kogut, B., and Jacobi, M., fasting rate and quantity of bile secretion in man, III, 221.
- Kogut, B., Jacobi, M., and Cohen, J. Y., effect of bile and vitamin-K on experimentally produced hemorrhagic diathesis in a human with a total external biliary fistula, III, 10.
- See also Jacobi, M.
- Zuckerman, S., human genera and species, III, 465. Histogenesis of tissues sensitive to oestrogens, III, 499. Effect of sex hormones, cortin, and vasopressin on water-retention in reproductive organs of monkeys, III, 651.
- and Groome, J. R., morphogenesis of intersexuality, III, 656.
- See also Dow, D., and Ogston, A. G.
- Zürcher, M. See Treadwell, W. D.
- Zuffanti, S., preparation of branched-chain aliphatic sulphonic acids, II, 265.
- Zugravesco, I. See Cracium, E. C.
- Zuithoff, A. J., exact measurements of specific heats of solid substances at high temperatures. XII. Specific heats of iron-nickel alloys of various compositions between 100° and 1400°, I, 156.
- Zumbrunn, R., 5-keto-4:4-dialkyldihydropyrroles, II, 381.
- Zumbusch, M., structure of uranium sulphide and of the subphosphides of iridium and rhodium, I, 286.
- Heimbrecht, M., and Biltz, W., germanium phosphide, I, 35.
- Zummo, C., and Infantellina, F., liverlipins in adrenalectomised rats, III, 728.
- and Sarzana, G., adrenals and thermoregulation. I. Effect of cortical extracts in defence mechanism against cold, III, 896.
- and Urso, R., adrenals and thermoregulation. III. Effect of adrenaline on gaseous exchange in adrenalectomised rats treated with cortical extracts, III, 896.
- Zumwalt, L. R., and Badger, R. M., complex structure of the O-H harmonic bands of substituted alcohols and the effect of temperature on the relative intensities of the multiplet components, I, 193.
- Zunz, E., and La Barre, J., effect of sex hormones on regulation of blood-sugar. I. Action of α -cestradiol benzoate, III, 31. Sex hormones and regulation of blood-sugar; action of progesterone, III, 307. Role of sex hormones in regulation of glycaemia, III, 381. Action of testosterone acetate on blood-sugar regulation, III, 647.
- Zurrow, H. See Saland, G.
- Zverev, V. V. See Magidson, O. J.
- Zvetkov, V., movement of anisotropic liquids in a rotating magnetic field, I, 15. Optical properties of anisotropic liquid layers in the rotating magnetic field, I, 64.
- See also Marinin, V.
- Zvjagintzev, O. E., and Jakovleva, E. A., interaction of gold with telluric and selenic acids, I, 227.
- and Paulsen, I. A., reaction of solutions of gold salts with natural sulphides, I, 264. Theory of formation of vein gold deposits, I, 330.
- See also Eristair, D. I., and Gogorischvili, P. V.
- Zwecker, I. T., effect of pituitary secretion of castrated rats on gonads of male rats joined in parabiosis, III, 650.
- Zweifach, B. W., rôle of particulate matter in perfusion of blood vessels, III, 709.
- See also Chambers, R.
- Zwerner, R. L., and Lowenstein, B. E., cortin-like effects of steroid glucosides on potassium, III, 728.
- Pines, K. L., and Lowenstein, B. E., effects of steroid glucosides and cortin on insulin convulsions and blood-sugar, III, 898.
- See also Chamberlain, F. L., and Wotton, R. M.
- Zwiauer, K. See Grube, G.
- Zwicker, J. J. L., and Kruysse, A., precipitation of alkaloids by cuprous chloride, II, 112.
- and Steenhauer, A. J., distribution of veronal in the brain in acute veronal poisoning, III, 602.
- Zworykin, V. K., electron microscope for the research laboratory, I, 395.
- Zylberszac, S. See Bastenie, P.
- Zycha, H., growth of two wood-destroying fungi: their behaviour towards carbon dioxide, III, 360.
- Zyodai, S. See Hachihama, Y.